



Flaming River's Promise to you...is to strive to provide the best quality products and service possible!

Jeanette Ladina President and CEO

As we celebrate 32 years in business, we are proud of the variety of products we have been able to manufacture directly at our Berea, Ohio, headquarters.

The products that we manufacture in the USA, which comprise 96% of our part numbers, include power rack and pinions, steering boxes, tilt steering columns, stainless roadster columns, key columns, universal joints and billet accessories. Look for the Made in the USA logo throughout the catalog for easy identification.



We are pleased to offer several new products again this year! Please see the following pages for details on these products:



VDOG Variable Degree Gear p. 98



Collapsible Micro Column Shift Tilt Column p. 59



Right Hand Drive Tilt Columns p. 58



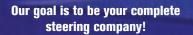
Bump Steer Kits p. 163



63-85 GM Single-Wire Alternator p. 179



Blank Slate/1948-52 Ford F1 Floor Mounts p. 96-97



Flaming River was founded in 1987 with a vision to offer quality Steering Systems for street rods, muscle cars, classics and trucks. Our products use all new parts to ensure that we can maintain quality standards, improve the original design, and offer long range product availability as well as lifetime serviceability. Tilt steering columns, power rack and pinions, steering shafts and billet accessories are all made right here at Flaming River by a talented group of people. Our promise to you is: "To provide the best quality products and service possible."



Rack & Pinions
Steering Boxes
Alternators
Battery Disconnect
Switches/Electrical
Apparel/Website

MADE IN

198

4 79

90

98

112

141

166

179

184

Over the past 32 years, we have designed many award-winning products, using state-of-the art engineering, technology, and quality control in our manufacturing process. Although this has been exciting, we know the best reward is a satisfied customer.

2016 Street Scene Manufacturer of the Year



This is our new showroom. Come by and see us sometime. Our door is always open to

Our door is always open to hot rodding friends!

Celebrating 32 Years...

Celebrating our 32nd year seems like an ideal time to take a look back at our history, and some of the highlights and innovations that helped us to become the company we are today. Each of these milestones were achieved with a team of dedicated professionals that have enabled our Dream Vision to become reality. While we look back with a bit of nostalgia at the exciting projects and products that we have been able to launch, and reflect on how quickly 32 years flies by, we also continue to look forward to new opportunities and new ways to evolve. As I am often asked how I got started in this Industry and at Flaming River, this history feature seems like an ideal way to share some of this story.

Jeanette

1987

In 1987 Flaming River enters the marketplace for the sole purpose of developing unique products for the Racing and Hot Rod Industry. This included products the Original Equipment Manufacturers were no longer making, like the Pinto rack and pinion for starters. In the beginning, we offered four main products:



Pinto – Drag Race Timing Light – Self Powered 2 D Battery Big Switch – Battery Master Shut off Tuff Ties in colors

Most of these products are still sold today. The overall philosophy of Flaming River remains to develop new products for the specialty market, and even then we knew that Junkyard parts weren't good enough for our Racers and Rodders! (Not to mention, parts that once were thought to be available forever, are no longer there.

1993-1995

By 1993, the company becomes a known entity to racers and rodders. We exhibit each year at SEMA and Performance Racing Trade Shows to meet customers and expand our market, and in fact, learn customers are asking for much more. The muscle car and classic car enthusiasts come knocking on our door for products they're having trouble finding. Exhibiting at SEMA each

year is an important part of business growth and allows us to connect with customers more directly.

1996

Listening to your customers is a great business model. Customers looking at our new rack and pinion wondered why we didn't offer universal joints. After careful research, we team up with a U.S. company and are proud to say that we now have over 600 combinations of universal joints available... All Made in the USA.



During this same period, we developed the Vega steering box... another all new product that is commonly used on roadster chassis's. We worked with a local builder and friend for the final fitment and details. Many knew him as the guy who was quoted as saying "The Sun never sets on the Cool"



2000

Welcome to Flaming River. This was the year Jeanette became the sole owner of Flaming River and decides to build our own building to allow us the ability to manufacture as much of our own products as possible. The tilt steering columns

becomes our flagship and truly says Flaming River USA.

1990

After starting work at Flaming River as an office student through the Co-op program at her high school, Jeanette Ladina becomes a part owner of the company at the age of 22. It was a year where we started to build upon the initial four products and the expansion of new product development began moving forward.





1994

Flaming River takes a big step and decides to build the 1974-78 Mustang manual rack and pinion. The Industry was waiting for this one - you couldn't find it anywhere and it was the standard chassis platform for Street Rod builders. In fact, at SEMA customers looking at the Pinto we made for Racing

and asked "Why can't you make this other rack that we really need?" Flaming River makes it happen and opens up a new and expanding marketplace.



1999

Never say history doesn't repeat itself. People ask and we respond with the **first all new** Made in the USA tilt steering column for the aftermarket, and score our

first SEMA New Product win. Manufactured and assembled with all new components and an attractive stainless steel design, no cores are used in our process. Great things to come – the goal is to build in house manufacturing for true flexibility and responsiveness to customer requests.



In order to meet demand and continue product line growth, machinery is the only way. We bought our first laser from Haas and retired the punch press. Customers wanted more and we delivered. Built



from the ground up, Flaming River creates the all-new Stainless, Laser-Cut Collapsible Tilt Steering Column for our product line.

...The Best is Yet to Come!

2004

Jeanette's business is built on "The customer who buys our products will receive the best products possible at a fair price". We are proud and we believe in USA Built to Last and Last. No matter what it is it has to look great too!





2005

Flaming River continues to move forward always working towards new products for Racing, Hot Rods, Muscle Cars and Classic trucks and cars. In 2005, we committed ourselves to developing our own Power Rack and Pinion. The industry for years had been using rebuilds and the supply of cores was clearly not the future. We built the first of its' kind "New Hot Rod Power Rack and Pinion".

The new rack and pinion was fitted to our 65-70 Mustang Rack and Pinion Cradle Kit with full turning radius and 6-1/8" of travel. It's one of a kind. We build them, test them and ves, they are repairable. All built in the USA in Berea, Ohio.



2006

Buying a Hot Rod, building a Hot Rod or repairing a Hot Rod is for many dream. Having a 32 Roadster is just American.

Our Roadster is unique in many ways. First, it is a rack and pinion straight-axle car uniquely designed with Flaming River Electric Steering. The Dominator front axle is LS powered and with all Flaming River steering it is a run-wild test car to be sure - part of the Flaming River family and often on display at shows and parked in our showroom. The first to have electric steering.

2008

Not all Hot Rods are cars. At Flaming River, we feel Hot Rods have no Limits. This one was completely built at Flaming River Flaming River employees. We truly



enjoyed it and it's the only Hot Rod we ever sold. We know it went to a good home in 2018.

2015

As mentioned earlier. our goal is to build products here at Flaming River. In 2015 we added our first Robot "Rosie" to help with our welding processes. In 2018, we will add our second



robot "Charlie" to help with our machine shop. Creativity and Technology will lead to the future of our company.



2016

We remodeled our showroom, including a new Hot Rod themed mural. 2016 is also the year we were honored with the Street Scene Manufacturer of the Year award.



2018

Since the beginning, Jeanette Ladina, President and owner of Flaming River has strived to build her company with quality and performance in mind for the benefit of the customer. She participates within various organizations SEMA, HRIA and at events such as NSRA and Goodguys.

The company has been honored with several New Product Wins and

Jeanette was honored to be named Goodguys 2004 Woman of the Year. In 2018 SEMA Town Hall was held at Flaming River Industries which allowed people to participate and learn about our Industry as well as connect with each other and tour our facility. Flaming River pushes the envelope by receiving ISO 9000:2008 Certification and Environmental Standards 14001:2004. The goal is quality product for a satisfied customer. You can be sure that if it doesn't say Flaming River, it's just not good enough.





It Just Isn't Good Enough!

- Floor Shift Tilt and Column Shift Key Columns are available in a stylish, compact design.
- Through our Custom Column Program, we can build to your specifications. See pg 62
- · Easily installs using one of our stylish Billet Mounts for a custom fit.
- Standard output on our columns is 1" DD. We also have a 1"-48 and 3/4"-36 splined style for a direct fit to your existing steering. Early Ford Keyway Columns can be ordered through our Custom Column Program.

The key features:

- Manufactured from 304 Stainless Steel. Streamlined design with radius slots for wiring.
- Precision laser-cut Floor Shift, Column Shift, "Roadster", and Racing Columns.
- Innovative Quality Manufacturing
- Flaming River focuses on designing products that meet our customers' demands.
- · When designing new products, our priority is to include new features and improve upon the original performance



STEERING COLUMN INDEX

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| ASSEMBLED COO PLUGO O | |
| | |
| -00m- | |
| Quality Steering Systems | |



all Column Shift Key Columns Not Sold Separately
Can be ordered for Non-Key Column
Shift Columns through our Custom
Column Program

including hexavalent chromium, which is known to the State of California to cause cancer.





This aftermarket cruise control kit, with a GM style lever, can be installed on your Flaming River* Tilt Column. Note: For vehicles with non-computer engines only. Order this when you order your Flaming River column and we will install it for you. Non-returnable.

FR20118-4

| O.D. x Length | Shaft Size | Mill Finish | Black Powder coat | Polished Stainless |
|---------------|-------------|-------------|-------------------|---------------------------|
| 2 x 28 | 1 Inch DD | FR30001-28 | FR30001-28BK | FR30001-28SS |
| 2 x 30 | 1 Inch DD | FR30001-30 | FR30001-30BK | FR30001-30SS |
| 2 x 32 | 1 Inch DD | FR30001-32 | FR30001-32BK | FR30001-32SS |
| 2 x 33 | 1 Inch DD | FR30001 | FR30001BK | FR30001SS |
| 2 x 35 | 1 Inch DD | FR30001-35 | FR30001-35BK | FR30001-35SS |
| O.D. x Length | Shaft Size | Mill Finish | Black Powder coat | Polished Stainless |
| 2 x 28 | 1 Inch - 48 | FR30002-28 | FR30002-28BK | FR30002-28SS |
| 2 x 30 | 1 Inch - 48 | FR30002-30 | FR30002-30BK | FR30002-30SS |
| 2 x 32 | 1 Inch - 48 | FR30002-32 | FR30002-32BK | FR30002-32SS |
| 2 x 33 | 1 Inch - 48 | FR30002 | FR30002BK | FR30002SS |
| 2 x 35 | 1 Inch - 48 | FR30002-35 | FR30002-35BK | FR30002-35SS |



OEM Factory Style Dash Mount – Key Column Billet Aluminum clamp can be used with virtually all OEM applications to facilitate the installation of a Flaming River Tilt Key Column in to an existing dash. FR20114K See Pg 95



Flaming River® now offers an integrated key column. The key is located at the original three o'clock position just like you would expect from Flaming River®. No welded on attachments or extra relays. Modeled after the popular Muscle Car Columns with Tilt and Ignition Key built into the column yet attractive enough to put into your street rod. Flaming River® manufactures the column complete with a GM coded key assembly, wiring, ignition and neutral safety switch.



FR20118-5 Key Column Wiring Adapter

Designed to adapt your wiring harness to a Flaming River® Key Column. (Not necessary if replacing a GM style key column.)



FR20300 Stramp Clamp

Fits the original OEM dash mount with a rubber Isolator for vibration absorption. GM 69 and up. Pat. No. US 7,976,065 B2



| O.D. x Length | Shaft Size | Mill Finish | Black Powder coat | Polished Stainless |
|------------------|-------------|-------------|----------------------|-----------------------|
| 2 x 28 | 1 Inch DD | FR30101-28 | FR30101-28BK | FR30101-28SS |
| 2 x 30 | 1 Inch DD | FR30101-30 | FR30101-30BK | FR30101-30SS |
| 2 x 32 | 1 Inch DD | FR30101-32 | FR30101-32BK | FR30101-32SS |
| 2 x 33 | 1 Inch DD | FR30101 | FR30101BK | FR30101SS |
| 2 x 35 | 1 Inch DD | FR30101-35 | FR30101-35BK | FR30101-35SS |
| 2 x 28 | 1 Inch - 48 | FR30102-28 | FR30102-28BK | FR30102-28SS |
| 2 x 30 | 1 Inch - 48 | FR30102-30 | FR30102-30BK | FR30102-30SS |
| 2 x 32 | 1 Inch - 48 | FR30102-32 | FR30102-32BK | FR30102-32SS |
| 2 x 33 | 1 Inch - 48 | FR30102 | FR30102BK | FR30102SS |
| 2 x 35 | 1 Inch - 48 | FR30102-35 | FR30102-35BK | FR30102-35SS |



CALIFORNIA WARNING: Cancer and Reproductive Harm



| 2 x Custom | FR20000XX | FR20000XXBK | FR20000XXSS |
|----------------|-----------|-------------|-------------|
| 1-3/4 x Custom | FR20000XX | FR20000XXBK | FR20000XXSS |

Flaming River is the only one I use,
The quality and the fitment is always on the money.



Dave Tucci Tucci Hot Rods





A Neutral Safety Switch is recommended and can be added to any Column Shift Column by adding NE to the end of the part number. Neutral Safety Switch must be ordered with column and is located 21" from the top of the shroud, unless otherwise specified. See Page 91

Optional Overdrive lens, part number FR200101NO Sold Separately

| O.D. x Length | Shaft Size | Mill Finish | Black Powdercoat | Polished Stainless |
|---------------|------------|-------------|---------------------|-----------------------|
| 2 x 28 | 1 Inch DD | FR20020 | FR20020BK | FR20020PL |
| 2 x 30 | 1 Inch DD | FR20021 | FR20021BK | FR20021PL |
| 2 x 33 | 1 Inch DD | FR20022 | FR20022BK | FR20022PL |
| 2 x 35 | 1 Inch DD | FR20029 | FR20029BK | FR20029PL |
| Custom Length | | | | |
| 2 x Custom | | FR20020XX | FR20020XXBK | FR20020XXSS |

indicator.

FOOR SILE

Add a tilt steering column to your classic 55-56 Chevy Bel-Air. We offer a variety of floor shift or column shift style tilt columns. Choose from a variety of accessories to complete your Tri-Five steering column installation.

Note: If you recently purchased a wiring harness, check to see if "flashers" are included with the kit. Otherwise, you may need to purchase the Tri-5 Chevy Hazard Kit (shown on facing page).







Floor Shift Tilt Column Part No. FR20005|Shown



The 1955-56 Chevy Floor Shift Tilt Column features a 2" tube diameter for a direct bolt-in fit with your existing dash bezel. This column is made from all-new components for updated steering technology. A billet aluminum dress up kit with tilt and turn signal levers and hazard knob, GM wiring (4-1/4" connector), and canceling cam are all included. Output shaft size is 1" DD.

| Application | Mill Finish | Black Powdercoat | Polished | Floor Mount | Wiring Adapter | U-Joint |
|-------------|-------------|------------------|-----------|-------------|----------------|--------------------------|
| 55 Chevy | FR20005 | FR20005BK | FR20005SS | FR20101-57 | FR20115 | FR1707DD (Stock Box) |
| 55 Chevy | FR20005 | FR20005BK | FR20005SS | FR20101-57 | FR20115 | FR1949 (Aftermarket Pwr) |
| 56 Chevy | FR20005 | FR20005BK | FR20005SS | FR20101-57 | FR20116 | FR1707DD (Stock Box) |
| 56 Chevy | FR20005 | FR20005BK | FR20005SS | FR20101-57 | FR20116 | FR1949 (Aftermarket Pwr) |





Column Shift Tilt Column

Part No. FR20023SS Shown

The 1955-56 Chevy Column Shift Tilt Column features a 2" tube diameter for a direct bolt-in fit with your existing dash bezel. This column is made from all-new components for updated steering technology. A billet aluminum dress up kit with tilt and turn signal levers and hazard knob, 6M wiring (4-1/4" connector), and canceling cam are all included. Combination back up and neutral safety switch also included. Output shaft size is 1" DD. Please Note: Wiring Adapter Kit (shown below) required for hazards if your wiring has not been updated.

| Application | Mill Finish | Black Powdercoat | Polished | Floor Mount | Wiring Adapter | U-Joint |
|-------------|-------------|---------------------|-----------|-------------|----------------|--------------------------|
| 55 Chevy | FR20023 | FR20023BK | FR20023SS | FR20101-57 | FR20115 | FR1707DD (Stock Box) |
| 55 Chevy | FR20023 | FR20023BK | FR20023SS | FR20101-57 | FR20115 | FR1949 (Aftermarket Pwr) |
| 56 Chevy | FR20023 | FR20023BK | FR20023SS | FR20101-57 | FR20116 | FR1707DD (Stock Box) |
| 56 Chevy | FR20023 | FR20023BK | FR20023SS | FR20101-57 | FR20116 | FR1949 (Aftermarket Pwr) |

See pg 13 for Accessories

STOLLY

Flaming River® introduces its all new "Shorty" 57 Chevy Tilt Steering Column—the shortest you can find with a 6-3/8" shroud! These allnew columns feature a 2" tube diameter and bolt directly into the existing dash bezel just like the original. Each column includes a billet

aluminum dress up kit (tilt lever, turn signal lever, and hazard knob), as well as GM wiring and a canceling cam.

These columns are available in a Floor Shift or Column Shift design with the option of a paintable mill finish or polished stainless finish. Column Shift columns come complete with a neutral safety switch as well as a removable shifter arm with 12 locating positions. Made in the USA and backed with a 3-year warranty and lifetime serviceability. Note: FR20101-57 Swivel Floor Mount is required for installation.

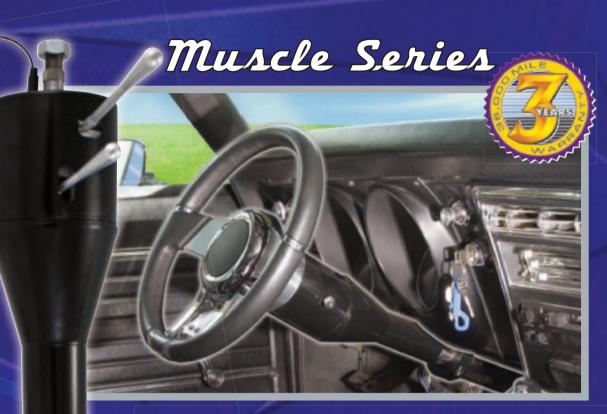


| | Application | Mill Finish | Black Powdercoat | Polished | Floor Mount | Wiring Adapter | U-Joint |
|---------|-------------|-------------|------------------|--------------|-------------|----------------|-----------------------------|
| Shift | 57 Chevy | FR20005-57 | FR20005-57BK | FR20005-57SS | FR20101-57 | FR20117 | FR1707DD (Stock Box) |
| Floor | 57 Chevy | FR20005-57 | FR20005-57BK | FR20005-57SS | FR20101-57 | FR20117 | FR1949 (Aftermarket Pwr) |
| n Shift | 57 Chevy | FR20023-57 | FR20023-57BK | FR20023-57SS | FR20101-57 | FR20117 | FR1707DD (Stock Box) |
| Column | 57 Chevy | FR20023-57 | FR20023-57BK | FR20023-57SS | FR20101-57 | FR20117 | FR1949 (Aftermarket Pwr) |









DON'T FORGET THE ACCESSORIES

67-68 Camaro 1"DD FR21020BK



| Accessories | | | | |
|---|---------|-----------|-----------|-----------------------------|
| Application Dash Mount Floor Mount Wiring Adapter U-Joint | | | | U-Joint |
| 67-68 Camaro | N/A | FR20101FB | FR20118-2 | FR1758 Pwr FR1716 Manual |
| 69 Camaro | FR20300 | FR20101FB | FR20118 | FR1758 Pwr FR1716 Manual |



FR30010SS - 1"DD

FR30010BK - 1"DD

79-81 Camaro

1"DD Shaft

FR30010 - 1"DD



DON'T FORGET THE ACCESSORIES



Did You Know?
Flaming River® Columns are made
from stainless steel so you can
scuff to create your own finish



70-81 Camaro Aluminum Swivel Floor Mount FR20101CA See pg 97

Wiring Harness Adapter for Key Column FR20118-5

Female Wiring Adapter 70-78 Camaro FR20118 See Page 91



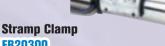




Column Dress Up Kit Black Powdercoat FR20112BK

69-81 Camaro Key Column Install Kit FRCA110

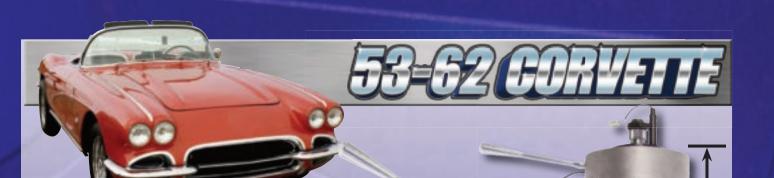




FR20300

Fits the original OEM dash mount with a rubber isolator for vibration absorption. GM 69 and up.

Pat. No. US 7,976,065 B2



1953-62 Corvette Steering Column

This all-new column has a 1-3/4" tube diameter, and 2-3/8" upper housing that integrates with the original dash configuration of the early 53-62 Corvettes. This column can also be used in Cobras, Roadsters, and other custom applications that need to be close to the dash. Includes a GM style turn signal and a 3/4"-36 splined shaft for easy connection to your existing steering. Available with or without hazards.



The Corvette dash was completely redesigned in 1958 with the instrument panel directly in front of the driver.

1958 Corvette Dash

| Part No | Style | | |
|-------------------|--|--|--|
| Straight Column (| (1-3/4" Dia) | | |
| FR1999VTR | Mill Stainless w/o Hazard | | |
| FR1999VTRSS | Polished Stainless w/o Hazard | | |
| FR1999VTR-H | Mill Stainless with Hazard | | |
| FR1999VTRSS-H | Polished Stainless with Hazard | | |
| FR1999XX** | Custom Length (XX) and Powder coat Color** | | |
| Accessories | | | |
| FR20118 | Wiring Adapter | | |
| FR1941 | Steering Coupler | | |



33"



DON'T FORGET THE ACCESSORIES

1953-62 Corvette Steering Wheel Adapters



Smooth radius design allows for original or aftermarket steering wheels onto a Flaming River® 53-62 Steering Column (FR1999VTR style). FR20156SS - Original Vette FR20157SS - Aftermarket 5/6 Bolt

3/4" Smooth X 3/4"-36 (1" OD) (To Adapt to Original Steering Box) Steering Coupler FR1941





5 ¹/₂"

| 110000001100 | |
|--------------|----------------|
| FR20118 | Wiring Adapter |
| | |

FR1941 Steering Coupler

**Color from RAL Deck must be specified when ordering Custom colors are non-returnable



1963-68 Corvette Tilt Steering Column

The design of these Tilt Columns is similar to the styling of the original straight column-right down to the 1-1/2" tube diameter-but now comes with the modern convenience of tilt steering! This all-new column fits into the original dash mount and features a 3/4"-36 spline (1963-66 Vette), or 1"-48 spline (1967-68 Vette) to connect to the existing steering setup. Available in Paintable, Black Powder coat, or Polished finishes.







| Part No. | Description |
|-------------|--|
| FR2000VT | 63-66 1-1/2" dia Mill Finish |
| FR2000VTA | 63-66 1-1/2" dia Mill Finish (when using FR Adapter) |
| FR2000VTBK | 63-66 1-1/2" dia Black |
| FR2000VTBKA | 63-66 1-1/2" dia Black Finish (when using FR Adapter) |
| FR2000VTSS | 63-66 1-1/2" dia Polished Finish |
| FR2000VTSSA | 63-66 1-1/2" dia Polished Stainless (when using FR Adapter) |

DON'T FORGET THE ACCESSORIES



Hazard Kit (4-Way Flashers): Pre-1969 FR20118-1 See Page 91

Later 68 Corvette **Aluminum Swivel Floor Mount** FR20101VT See pg 97



Corvette Wheel Adapter This custom polished aluminum adapter is designed to mount your original Corvette steering wheel to a Flaming River Tilt Column. FR2000VT-AD Polished FR2000VT-ADBK Black Powder coat

See Page 93

FR2103VTBK Later 1968 Corvette

OEM Shroud Not Included

FR2003VT 1967-68 Corvette

> **FR2001VTSS** 1967-68 Corvette

OEM Style Brackets



Quality Steering Systems

| 100 | | |
|-----|--------------|--|
| | Part No. | Description |
| | FR2001VT | 67-68 1-1/2" dia Mill Finish |
| | FR2001VTA | 67-68 1-1/2" dia Mill Finish (when using FR Adapter) |
| | FR2001VTBK | 67-68 1-1/2" dia Black Powder Coat |
| S | FR2001VTBKA | 67-68 1-1/2" dia Black Powdercoat (when using FR Adapter) |
| | FR2001VTSS | 67-68 1-1/2" dia Polished Stainless |
| Ì | FR2001VTSSA | 67-68 1-1/2" dia Polished Stainless (when using FR Adapter) |
| | FR2003VT | 1967-1968 1-1/2" dia Mill Stainless |
| | FR2003VTA | 1967-1968 1-1/2" dia Mill Stainless (when using FR Adapter) |
| | FR2003VTBK | 1967-1968 1-1/2" dia Black w/CWL |
| Š | FR2003VTBKA | 1967-1968 1-1/2" dia Black w/CWL (when using FR Adapter) |
| | FR2003VTBKTH | Top Hat 67 1-1/2" dia Black Column |
| | FR2003VTSS | 1967-1968 1-1/2" dia Pol. Stainless |
| H | FR2003VTSSA | 1967-1968 1-1/2" dia Pol. Stainless (when using FR Adapter) |
| | FR2103VT | 1968 2" dia Mill Stainless |
| | FR2103VTBK | 1968 2" dia Black Powder Coat |
| | FR2103VTSS | 1968 2" dia Polished Stainless |

All new mounts and dash bezel included with all columns

Lifetime Serviceability

FLAMING RIVER CERTIFIED

1969-82 Corvette Tilt Key Column

This classic C3 Corvette Tilt Key Column features the ignition switch integrated at the original 3 o'clock location. This column includes a billet aluminum dress up kit with turn signal/tilt levers and a hazard knob, GM wiring, and a canceling cam. Available in Paintable, Black Powder coat, and Polished finishes.



Note: For 1975-1982 Corvettes-this column does not include wiper, cruise control, or dimmer switch controls (Dimmer switch and cruise control available upon request).

FRCA108 Key Column Installation Kit recommended.





Flaming River® Key Columns are manufactured with a GM coded key assembly

DON'T FORGET THE ACCESSORIES

Upgrade from factory Rag Joint to a stronger Needle-Bearing U-Joint



See pgs 99-102



Electronic Cruise Control FR20118-4 See pg 6



Corvette Wheel Adapter
FR2000VT-AD Polished
FR2000VT-ADBK Black Powder coat
See pg 93

5/6 Bolt Wheel Adapter for Flaming River® Column FR20119TA See pg 92

5/6 Bolt Bell-Style Wheel Adapter for Flaming River® Column FR20119BA See pg 92



1969-82 Corvette Key Column Installation Kit FRCA108

69-82 Corvette Swivel Mount FR20101VT See pg 97



FLAMING RIVER Bolts to Original Mount 1969-1972 Black Powder Goat FR30009BK 1964**-**1966 Polished **FR20005SS** 1967-1968 Paintable/Mill Finish FR21019 FR20101CH **64-67 Chevelle Floor Mount** 64-66 Chevelle/ See pg 97 El Camino Column **Install Kit FRCA100** FR20101AB **68-72 Chevelle Floor Mount** See pg 97





O It's a Direct Fitt

| 64-72 Chevelle | 64-66 Chevelle w/Shaft Upgrade | 64-66 Chevelle | 67-68 Chevelle 1"48 | 67-68 Chevelle 1"DD | 69-72 Chevelle | 69-72 Chevelle Column Shift |
|---------------------------------|---|-------------------------------------|------------------------|------------------------|------------------|--------------------------------|
| Paintable/Mill Finish Column | FR20005 | FR20005 | FR21019 - 1"48 | FR21020 - 1"DD | FR30009 - 1"48 | FR30009GS |
| Black Powder Coat Column | FR20005BK | FR20005BK | FR21019BK - 1"48 | FR21020BK - 1"DD | FR30009BK - 1"48 | FR30009GSBK |
| Polished Column | FR20005SS | FR20005SS | FR21019PL - 1"48 | FR21020PL - 1"DD | FR30009SS - 1"48 | FR30009GSPL |
| Dash Mount | N/A | N/A | N/A | N/A | FR20300 | FR20300 |
| Floor Mount | FR20101CH | FR20101CH | FR20101CH | FR20101CH | FR20101AB | FR20101AB |
| Wiring Adapter | FR20118-1 | FR20118-1 | FR20118-1 | FR20118-1 | FR20118 | FR20118 |
| U-Joint | FR1717DD FR1856 FR1758 (Power) FR1717DD FR1856 FR1714DD (Manual) | FR1707DD (Modify Stock Shaft) | N/A | FR1949T | N/A | N/A |

Also available: FR21029, FR21029SS, FR21029BK fits 1964-66 Pontiac GTO, Buick GS, Olds 442

DON'T FORGET THE ACCESSORIES





| Nova/Chevy II | 62-66 Nova/Chevy II | 67 Nova | 69-74 Nova | 69-74 Nova (Column Shift) |
|------------------------------|----------------------|-----------|--------------------------------|--------------------------------|
| Paintable/Mill Finish Column | FR20005 | FR21010 | FR30009 - 1"48 | FR30009GS |
| Black Powder Coat Column | FR20005BK | FR21010BK | FR30009BK - 1"48 | FR30009GSBK |
| Polished Column | FR20005SS | FR21010SS | FR30009SS - 1"48 | FR30009GSPL |
| Dash Mount | N/A | N/A | FR20300 | FR20300 |
| Floor Mount | N/A | N/A | FR20101FB | FR20101FB |
| Wiring Adapter | FR20118 | FR20118 | FR20118 | FR20118 |
| U-Joint | FR1707DD (Stock Box) | N/A | FR1758 (Power) FR1716 (Manual) | FR1758 (Power) FR1716 (Manual) |



DON'T FÓRGET THE ACCESSORIES



53-69 III PAUGIPRES

Impala Tilt Steering Columns

Floor Shift and Column Shift style Tilt Columns are now available as a direct fit bolt-in to replace the original column. Each column comes complete with a billet dress up kit with turn signal lever, hazards, horn and canceling cam. With a 3/4"-36 output shaft, you can connect to your original steering setup and also use a 1969 and up GM steering wheel. Made of 304 Stainless Steel and available in Paintable or Polished finishes.





58=60 Golumn Shffit FR21012PL

Neutral Safety Switch Included

| 58-60 Direct Fit | Mill Stainless | Black Powder Coat | Polished |
|----------------------|----------------|-------------------|-----------|
| Floor Shift Columns | FR21011 | FR21011BK | FR21011PL |
| Column Shift Columns | FR21012 | FR21012BK | FR21012PL |
| Floor Mount | FR20098 | | |
| Wiring Adapter | FR20118 | | |



| 61-62 | Mill Stainless | Black Powder Coat | Polished |
|----------------------|----------------|-------------------|------------|
| Floor Shift Columns | FR21013 | FR21013BK | FR21013PL |
| Column Shift Columns | FR21014 | FR21014BK | FR21014PL |
| Floor Mount | | FR20098 | STATE OF |
| Wiring Adapter | | FR20118 | AND LOSE D |





69-64 Column Shift FR21016

| 63-64 Direct Fit | Mill Stainless | Black Powder Coat | Polished |
|----------------------|----------------|-------------------|------------------|
| Floor Shift Columns | FR21015 | FR21015BK | FR21015PL |
| Column Shift Columns | FR21016 | FR21016BK | FR21016PL |
| Floor Mount | | FR20098 | 3 (1) (5) |
| Wiring Adapter | | FR20118 | 1 |





| 65-68 Direct Fit | Mill Stainless | Black Powder Coat | Polished |
|----------------------|----------------|-------------------|-----------|
| Floor Shift Columns | FR21023 | FR21023BK | FR21023PL |
| Column Shift Columns | FR21024 | FR21024BK | FR21024PL |
| Floor Mount | | FR20098 | |
| Wiring Adapter | | FR20118 | |



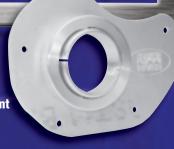
Original mounting pattern for dash mount.

Original dash bezel.

Utilize Original Factory

Dash Mounts

58-64 Impala Swivel Floor Mount FR20098 See pg 97





| Don't Forget the Accessories | | | | | |
|------------------------------|-----------|------------|--------------------------|-------------|----------------|
| Application | Column | Dash Mount | Dash Mount (3 1/2" Drop) | Floor Mount | Wiring Adapter |
| 48-55 Chevy Truck (FS) | FR20005 | FR20114 | | FR20101 | FR20118-1 |
| 48-55 Chevy Truck (FS) | FR20005 | FR20114 | | FR20101 | FR20118-1 |
| 55-56 Chevy Truck (GS) | FR20021NE | | FR20108PL | FR20101 | FR20118-1 |

| Chevy/GMC C/K 10 - C/K 20 19 | 960-66 | Recommended Accessories: | |
|------------------------------|--------------|--------------------------|---|
| Finish | Floor Shift | Column Shift | FR20114 - OEM Factory Style Dash Mount (2" Dia.) |
| Mill Stainless - Manual | FR21000M | FR21100M | FR20119TA - 5/6 Bolt Steering Wheel Adapter |
| Mill Stainless - Early Power | FR21000P1 | FR21100P1 | Note: Early Power Box (Original GM) uses a 13/16"- |
| Mill Stainless - Late Power | FR21000P2 | FR21100P2 | 36 spline. Late Power Box (Late model GM truck box) uses a 3/4"-30 spline. Please verify before ordering. |
| Polished - Manual | FR21000MSS | FR21100MSS | Black Powder coat available through our custom |
| Polished - Early Power | FR21000P1SS | FR21100P1SS | column program. Color from RAL Deck must be |
| Polished - Late Power | FR21000P2SS | FR21100P2SS | specified when ordering. Custom colors are non- |
| Custom Color | FR21000M-CLR | FR21100M-CLR | returnable |



FR20030-F / FR20030PL-F: NSS is measured 10" up from the bottom of shaft Order our new LED Shift Indicator for Non-Key Column Shift Columns through our Custom Column Program.

lt's a Direct Fit! Dimmer Available. Wiper Switch not available for 85 and later. All of our Key Columns have GM-coded Ignitions FR30106BK **Shown with** FR30006SS Install the upper portion of the new Flaming River® 5/6 Bolt Wheel Adapter FR20119TA-BK **Mounting Clamp** into the stock location. Slide the new steering column through the opening in the original floor mount, and then slide the column through the opening in the firewall. **Stock Floor Mount Shown** Chevy/GMC C/K 10 - C/K 20 1973-87 Floor Shift **Column Shift Finish** 1" DD FR30006 **Mill Stainless** FR30106 FR30106BK FR30006BK **Black Powder coat** FR30106SS **Polished Stainless** FR30006SS 1"-48 **Mill Stainless** FR30006-48 FR30106-48 **Black Powder coat** FR30006-48BK FR30106-48BK FR30106-48SS **Polished Stainless** FR30006-48SS

If you want to upgrade your steering system, Flaming River® also offers bolt-in rack and pinion cradle kits for the 1973-87 C-10 truck. (See Pg. 125)





DON'T FORGET THE ACCESSORIES

Dimmer Switch Kit FR20118-8 See pg 91



FR20300 Stramp Clamp

Fits the original OEM dash mount with a rubber isolator for vibration absorption. GM 69 and up. Pat. No. US 7,976,065 B2



Electronic Cruise Control

This aftermarket unit can be installed on your new Flaming River® Tilt Column to add the convenience of Cruise Control. Designed for non-computer engines. GM-style turn signal lever.

FR20118-4



FR20112BK

GJ-70 HUSTALE





This all-new Tilt Steering Column looks great with an aftermarket steering wheel, or you use your original wheel with our Ford-spline style column (Some modification to your original wheel may be necessary). Our Tilt Columns are available in paintable mill or polished stainless finishes. We also offer steering wheel adapters, and convenient Column Installation Kits for mounting.

| Part No. | Description | | | | |
|----------------------------|---|--|--|--|--|
| Aftermarket Steering Wheel | | | | | |
| FR20005 | 65-66 Paintable Tilt Column - GM Spline for Aftermarket Steering Wheel | | | | |
| FR20005SS | 65-66 Polished Tilt Column - GM Spline for Aftermarket Steering Wheel | | | | |
| FR20005BK | 65-66 Black Powdercoat Tilt Column - GM Spline for Aftermarket Steering Wheel | | | | |
| FR20004-69 | 67-70 Paintable Tilt Column - GM Spline for Aftermarket Steering Wheel | | | | |
| FR20004-69SS | 67-70 Polished Tilt Column - GM Spline for Aftermarket Steering Wheel | | | | |
| FR20004-69BK | 67-70 Black Powdercoat Tilt Column - GM Spline for Aftermarket Steering Wheel | | | | |
| Factory Ford Steeri | ng Wheel Only | | | | |
| FR2000MU1 | 65-66 Paintable Tilt Column - Ford Spline for Factory Ford Steering Wheel | | | | |
| FR2000MU1SS | 65-66 Polished Tilt Column - Ford Spline for Factory Ford Steering Wheel | | | | |
| FR2000MU1BK | 65-66 Black Powdercoat Tilt Column - Ford Spline for Factory Ford Steering Wheel | | | | |
| FR2000MU2 | 67-70 Paintable Tilt Column - Ford Spline for Factory Ford Steering Wheel | | | | |
| FR2000MU2SS | 67-70 Polished Tilt Column - Ford Spline for Factory Ford Steering Wheel | | | | |
| FR2000MU2BK | 67-70 Black Powdercoat Tilt Column - Ford Spline for Factory Ford Steering Wheel | | | | |
| Installation Kit | | | | | |
| FR200MUKT | 65-66 Mustang Installation Kit | | | | |
| FR200MUKT2 | 67-70 Mustang Installation Kit | | | | |
| FR200MUKTNO | 65-66 Installation Kit with No Universal Joint | | | | |
| FR200MUKT2N0 | 67-70 Installation Kit with No Universal Joint | | | | |





- · Make sure that the column is straight before securing column.
- Mark the location of the tabs on the column using a center punch or scribe (Fig 3), then remove the column from the car and drill a small pilot hole for each screw (Fig 4).
- Fasten the new floor mount to the column by using the screws provided with the hardware kit then reinstall the steering column into the car.





DON'T FORGET THE ACCESSORIES



COUPES & ROLLS HIS

FLAMING RIVER



FR1999ROSS

304 Stainless Nostalgia Non-Tilt Steering Column

This nostalgia column is ideal for Roadsters, Cobras, and other custom applications that require a sleek and compact column. An attractive bell-style column with a 1-3/4" tube diameter, 30" overall length, and 3/4"-36 splined shaft. A billet dress up kit is included with GM turn signal lever, hazard knob, and horn. Note: Custom lengths available upon request.

| Part No | Finish |
|-----------------|------------------------------------|
| FR1999R0-30 | Mill Stainless |
| FR1999R0SS-30 | Polished Stainless |
| FR1999R0BK-30 | Black Powder coat |
| FR1999ROSS-30LC | Polished Laser Cut Collapsible |
| FR1999CU | Custom - Mill Stainless |
| FR1999GUSS | Custom - Polished Stainless |

Custom Columns Are Non-Returnable

| Length | Paintable | Black Chrome Powder coat | Black Powder coat | Polished | Custom Color / Length |
|--------|------------|-----------------------------|----------------------|--------------|--------------------------|
| 28" | FR21022-28 | FR21022-28BC | FR21022-28BK | FR21022-28PL | FR21022XX** |
| 30" | FR21022-30 | FR21022-30BC | FR21022-30BK | FR21022-30PL | FR21022XX** |
| 32" | FR21022-32 | FR21022-32BC | FR21022-32BK | FR21022-32PL | FR21022XX** |

**Color from RAL Deck must be specified when ordering

Custom colors are non-returnable



Stainless Steel Tilt Roadster Column

FR21022PL

Sleek 1-3/4" Diameter Roadster Tilt Column

FR20001SS

| | Paintable | Black | Polished | Custom Color |
|--------|-----------|-------------|-----------|---------------------|
| Length | | Powder coat | | |
| 28" | FR20000 | FR20000BK | FR20000SS | FR20000** |
| 30" | FR20001 | FR20001BK | FR20001SS | FR20001** |
| Custom | FR20000XX | FR20000XX | FR20000XX | FR20000XX** |

**Color from RAL Deck must be specified when ordering
Custom colors are non-returnable







304 Stainless Nostalgia Non-Tilt Steering Column

This nostalgia column is ideal for Roadsters, Cobras, and other custom applications that require a sleek and compact column. An attractive bell-style column with a 1-3/4" tube diameter, 30" overall length, and 3/4"-36 splined shaft. A billet dress up kit is included with GM turn signal lever, hazard knob, and horn. Note: Custom lengths available upon request.



| Part No | Finish |
|-----------------|------------------------------------|
| FR1999RO-30 | 30" Mill Stainless |
| FR1999ROSS-30 | 30" Polished Stainless |
| FR1999R030-BK | 30" Black Powder coat |
| FR1999ROSS-30LC | 30" Polished Laser Cut Collapsible |
| FR1999R0-32 | 32" Mill Stainless |
| FR1999RO-32PL | 32" Polished Stainless |
| FR1999CU | Custom - Mill Stainless |
| FR1999CUSS | Custom - Polished Stainless |

Custom Columns Are Non-Returnable





3 Bolt Wheel Adapter
Designed to mount any traditional 3 Bolt Steering
Wheel to a Flaming River column for a seamless
and streamlined appearance.
FR3304 (Polished) FR3304BK (Black)

Roadster Column 3 to 5/6 Bolt
Steering Wheel Adapter - FR20119
This billet steering wheel adapter allows mounting of a 5 or 6 bolt steering wheel on our 3-bolt Roadster Column FR3301). This new pattern combination enables the use of most aftermarket steering wheels.

Note: Horn button will not be

WaterFall Adapter for Stainless Nostalgia Column

This wheel adapter is designed to combine the modern, billet elegance of our WaterFall Steering Wheel with our Stainless Nostalgia Column



functional.



Shown with Banjo Steering Wheel

MADE IN



new column is ideal for classic trucks and roadsters.

- Only 5-1/2" from the bottom of the dish to the top of the column's shroud.
- Compact space-saving design has a nostalgic look and full tilt functionality.
- Fits snug against the dash and, compared to a standard tilt column, allows for an additional 2" of clearance in the driver's seat.
- Each column is CNC machined from high-grade 304 stainless steel.
- Sleek 1-3/4" tube diameter and is available in a variety of lengths.
- Finishes include paintable mill, polished, and black or custom powder coat.
- GM 4-1/4" wiring connector, horn functionality, canceling cam, turn signal arm, tilt lever, and hazard knob.
- All Flaming River steering columns are proudly Made in the USA.



| Length | Paintable | Black Chrome Powder coat | Black Powder coat | Polished | Custom Color / Length |
|--------|------------|-----------------------------|----------------------|--------------|-----------------------|
| 28" | FR21022-28 | FR21022-28BC | FR21022-28BK | FR21022-28PL | FR21022XX** |
| 30" | FR21022-30 | FR21022-30BC | FR21022-30BK | FR21022-30PL | FR21022XX** |
| 32" | FR21022-32 | FR21022-32BC | FR21022-32BK | FR21022-32PL | FR21022XX** |

Custom Powdercoat Available

**Nonreturnable and color from RAL Deck must be specified when ordering



**Color from RAL Deck must be specified when ordering

Custom colors are non-returnable



| | Part No | Finish |
|---|-----------------|--------------------------------|
| | FR1999RO-30 | Mill Stainless |
| | FR1999ROSS-30 | Polished Stainless |
| | FR1999RO-30BK | Black Powder coat |
| | FR1999ROSS-30LC | Polished Laser Cut Collapsible |
|) | FR1999CU | Custom - Mill Stainless |
| | FR1999CUSS | Custom - Polished Stainless |
| | | • |

Custom Columns Are Non-Returnable



FR20005SS

Tried & true fabulous products. I'm proud to use a Flaming River steering column on my Great & Truck "Mirage"

Richard Broyles "Mirage" 1941 Ford Roadster Truck



CUSTOM COLUMNS AVAILABLE

See pg 60 for ordering information





DON'T FORGET THE ACCESSORIES



15-57/11-UNU-RBRD





o It's a Direct Fit!

Aftermarket Original **Finish Steering Wheel Steering Wheel** 56-57 Thunderbird **Mill Stainless** FR20009 FR200090E **Polished Stainless** FR20009SS FR200090ESS 55 Thunderbird **Mill Stainless** FR20008 FR200080E **Polished Stainless** FR20008SS FR200080ESS

Lifetime Serviceability

FLAMING RIVER CERTIFIED Flaming River Certified
The Flaming River
Certified imprint and the
logo stamped on each
product indicate that
all have been tested to
exacting standards.



Install the original dash bezel and column mounting bracket over the new split ring spacer onto the new Flaming River® Tilt Column.



DON'T FORGET THE ACCESSORIES

Cruise Control Kit

This aftermarket cruise control kit, with a GM style lever, can be installed on your Flaming River Tilt Column. Note: For vehicles with noncomputer engines only. Order this when you order your Flaming River column and we will install it for you. Non-returnable.

FR20118-4



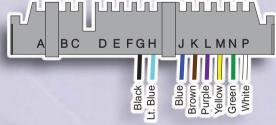


Female Wiring Adapter FR20118

Connecting the Electrical System

| Wiring Circuit | Pin Location | <u>Column Wi</u> |
|-------------------------|--------------|------------------|
| Brake Light Switch | Р | White |
| Right Rear Turn Signal | N | Dark Green |
| Left Rear Turn Signal | M | Yellow |
| Turn Signal Power | L | Purple |
| Hazard Power | K | Brown |
| Right Front Turn Signal | J | Dark Blue |
| Left Front Turn Signal | Н | Light Blue |
| Horn | G | Black |
| | | |

Column Includes steering box shaft adapter for easy installation to the original steering box.



Caution: Before disconnecting your original steering column wiring harness please verify each wire color and function. Some wire colors may vary from year to year.

Hazard Note: Some vehicles did not have hazards from the factory, so no hazard power wire is present but can be added by purchasing part # FR 20118-1





See pgs 80-89



FR21017

60-65 Comet/Falcon (For use with Aftermarket Steering Wheel)

Floor Shift

Mill Stainless FR21018

Polished Finish FR21018PL

Column Shift

Mill Stainless FR21017

Polished Finish FR21017PL



DON'T FORGET THE ACCESSORIES



60-65 Comet/Falcon Swivel Floor Mount FR20097 See pg 97

Shift Indicator Adjustment Kit FR20059 See pg 94



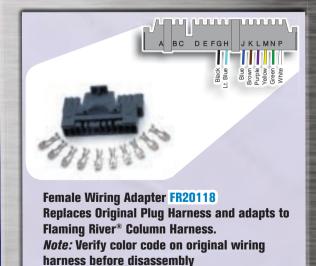






DON'T FORGET THE ACCESSORIES







| Application | Mill Stainless | Polished Stainless | Black Powdercoat | Dash Mount | Floor Mount | Wiring Adapter |
|--|-------------------|-----------------------|---------------------|------------|-------------|-------------------|
| 48-52 Ford Truck (FS) | FR20005 | FR20005SS | FR20005BK | FR20108PL | N/A | FR20118-1 |
| 48-52 Ford Truck (GS) | FR20021NE | FR20021NE-PL | A WELL | FR20108PL | N/A | FR20118-1 |
| 53-56 Ford Truck (FS) | FR20005 | FR20005SS | FR20005BK | FR20108PL | FR20101F1 | FR20118-1 |
| 53-56 Ford Truck (GS) | FR20021NE | FR20021NE-PL | TRANSFER OF | FR20108PL | FR20101F1 | FR20118-1 |
| Roadster Style | FR21022-30 | FR21022-30PL | FR21022-30BK | W 1 6 1 1 | | |
| 53-56 F100 (FS) Using 53-56 F100 Steering Wheel | FR20005F1 | FR20005F1SS | FR20005F1BK | 198 | | |

Recommended Accessories:

[•] FR20108PL – 3-1/2" Polished Column Drop for easy column mounting (2" Diameter)
• Universal Joint Kit • FR20119TA – 5/6 Bolt Steering Wheel Adapter





53-56 Ford F100 Tilt Steering Column FR20005F1SS **Features and Benefits:**

- Designed with a custom shroud to fit seamlessly with a reproduction F100 steering wheel
- Wiring for turn signals, hazards, and horn functionality included
- Made in USA

1953-56 Ford F100 Tilt Steering Column (with Horn Contact) Fits Reproduction Steering Wheel
Stainless tilt column with horn kit. Custom shroud fits reproduction steering wheel. Paintable, polished, powdercoat finishes available. Includes dress

up kit and turn signal wiring

DON'T FORGET THE ACCESSORIES



55-77 FURT BROKES

Flaming River has designed a Direct Tilt Steering Column to fit the 1966-77 Bronco with mounts on the column for easy installation. This column is sold as a kit with a slip shaft and universal joint, floor mount and wiring connector to ease installation and provide a collapsible shaft. A custom machined dress up kit (extended length turn signal, tilt and hazard) is included with this column.

- Direct Rolt in installation
- Column Shift or Floor Shift available

OEM Style Dash

Mount Bracket

- Replaces solid shaft in original Bronco with a slip shaft which improves safety and performance
- Kit includes all components necessary for installation including a 3/4"-36 u-joint to fit original steering box
- · Custom floor mount is included to complete the install

Sold as a Complete Install Kit FR30017KT



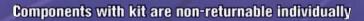
Ford Wiring Harness



Also available with a Floor Shift Tilt Column

NEW!

66-71 Bronco Swivel Floor Mount FR20101BR1



| 66-71 Bronco Column Install Kits | | | |
|--|-------------|-------------|--|
| Column Shift Column Floor Shift Column | | | |
| Mill Stainless | FR30017KT | FR30018KT | |
| Polished Stainless | FR30017KTSS | FR30018KTSS | |
| Black Powdercoat | FR30017KTBK | FR30018KTBK | |









DON'T FORGET THE ACCESSORIES











- 45" Overall Length
- Built-in Slip & Collapsible Shaft with 1-1/2" of Movement (Except where noted)
- Billet Joint® for Direct Connection to the Steering Box (Except where noted)
- Shaft Adjustable Tilt Column can be used for many applications
- Includes Female Turn Signal Wiring Adapter & Ignition Plug Harness
- Compact Shroud Design (only 8 inches) allows for driver positioning comfort
- All Stainless Steel (304) mill finish, polished or black powdercoat
- Made in the USA!

Mopar Tilt Steering Columns

Each column comes with a slip shaft extension for an overall length of 45". The slip shaft extension allows for 1-1/2" of slip movement, and includes a Universal Joint for direct connection to the steering box. These Tilt Steering Columns are made from 304 stainless steel, use all-new parts and come in three different finishes: Paintable Mill, Black Powder Coat, and Polished Stainless, Each Tilt Column includes billet dress-up kit with tilt lever. turn signal/hazard switch, and female plug kit for connecting to original wiring harness. Horn relay, hazard kit, and steering wheel adapters may be



Columns also available without slip shaft and u-joint. See website for details

70-76 Tilt Key Column w/o Slip Shaft/U-joint (Polished)

70-76 Tilt Non-Key - Manual Steering (Black Powder Coat)

70-76 Tilt Non-Key - Power Steering (Black Powder Coat)

70-76 Tilt Non-Key - Manual Steering (Paintable)

70-76 Tilt Non-Key - Manual Steering (Polished)

70-76 Tilt Non-Key - Power Steering (Paintable)

70-76 Tilt Non-Key - Power Steering (Polished)

FR30011CSS

FR21028

FR21028PL

FR21028BK

FR21028P

FR21028PPL

FR21028PBK



KEY COLUMNS

NON-KEY COLUMNS

B Body: 1962-70 Belvedere; 1975-78 Fury, GTX; 1968-75 Road Runner; 1965-74 Satellite, Charger; 1965-76 Coronet; 1978 Magnum; 1977-78 Monaco

| | FR30012CM | 70-78 Tilt Key - Manual Steering (Paintable) |
|---|--|--|
| | FR30012CMBK | 70-78 Tilt Key - Manual Steering (Black Powder Coat) |
|) | FR30012CMSS | 70-78 Tilt Key - Manual Steering (Polished) |
| | FR30012CP | 70-78 Tilt Key - Power Steering (Paintable) |
| | FR30012CPBK | 70-78 Tilt Key - Power Steering (Black Powder Coat) |
| : | FR30012CPSS | 70-78 Tilt Key - Power Steering (Polished) |
| | FR30012C | 70-78 Tilt Key Column w/o Slip Shaft/U-joint (Mill Finish) |
| | FR30012CBK | 70-78 Tilt Key -Column w/o Slip Shaft/U-joint (Black Powder Coat) |
| | FR30012CSS | 70-78 Tilt Key Column w/o Slip Shaft/U-joint (Polished) |
| | | |
| | FR21025C | 66-69 Tilt - w/o Slip Shaft & U-Joint (Paintable) |
|) | FR21025C FR21025CBK | 66-69 Tilt - w/o Slip Shaft & U-Joint (Paintable) 66-69 Tilt - w/o Slip Shaft & U-Joint (Black Powder Coat) |
| | | |
| | FR21025CBK | 66-69 Tilt - w/o Slip Shaft & U-Joint (Black Powder Coat) |
| | FR21025CBK FR21025CSS | 66-69 Tilt - w/o Slip Shaft & U-Joint (Black Powder Coat) 66-69 Tilt - w/o Slip Shaft & U-Joint (Polished) |
| | FR21025CBK FR21025CSS FR21025M | 66-69 Tilt - w/o Slip Shaft & U-Joint (Black Powder Coat) 66-69 Tilt - w/o Slip Shaft & U-Joint (Polished) 66-69 Tilt - Manual Steering (Paintable) |
| | FR21025CBK FR21025CSS FR21025M FR21025MBK | 66-69 Tilt - w/o Slip Shaft & U-Joint (Black Powder Coat) 66-69 Tilt - w/o Slip Shaft & U-Joint (Polished) 66-69 Tilt - Manual Steering (Paintable) 66-69 Tilt - Manual Steering (Black Powder Coat) |
| | FR21025CBK FR21025CSS FR21025M FR21025MBK FR21025MSS | 66-69 Tilt - w/o Slip Shaft & U-Joint (Black Powder Coat) 66-69 Tilt - w/o Slip Shaft & U-Joint (Polished) 66-69 Tilt - Manual Steering (Paintable) 66-69 Tilt - Manual Steering (Black Powder Coat) 66-69 Tilt - Manual Steering (Polished) |



Mopar Swivel Floor Mounts



A-Body Mopar Swivel Floor Mount FR20101MPA See pg 97



62-69 B-Body Mopar Swivel Floor Mount FR20101MP See pg 97



70-74 E-Body Mopar Swivel Floor Mount FR20101MPE See pg 97



Flaming River has designed a Direct Tilt Ignition Steering Column for the Mopar E Body. This is a direct bolt-in column with the mounting holes in place to use the original bracket, and a collapsible slip shaft with universal joint is included for easy install. The new design is available with an exciting new vintage style "Canister" adapter which will fit with the Tuff Wheel for a complete muscle look. Add the new E body floor mount and you have a complete system for your Mopar.



Gilbert Haas' 1971 Viper Cuda

70-74 E Body: Challenger - Cuda

| 10 11 2 20 mg 1 0 m | |
|---------------------|--|
| FR30013CM | 70-74 Tilt Key - Manual Steering (Paintable) |
| FR30013CMBK | 70-74 Tilt Key - Manual Steering (Black Powder Coat) |
| FR30013CMSS | 70-74 Tilt Key - Manual Steering (Polished) |
| FR30013CP | 70-74 Tilt Key - Power Steering (Paintable) |
| FR30013CPBK | 70-74 Tilt Key - Power Steering (Black Powder Coat) |
| FR30013CPSS | 70-74 Tilt Key - Power Steering (Polished) |

E-Body Column

FR20118-6

Mopar Wiring Adapter

FR20101MPE

New Swivel Floor Mount



FR20182

New Steering Wheel Adapter







DON'T FORGET THE ACCESSORIES



FR20161AD

My 1971 Viper Cuda Pro-Touring build debuted at the 2016 Columbus Nationals as a Street Machine of the Year (SMotY) contender. The build featured your steering column with a Mopar ignition key. I would like to thank you for your products which helped me compete at that level.

Gilbert Haas President, Haas Laser Technologies

BIGHT HAMD DRIVE COLUM

Flaming River has designed a gear shift with the shifter on the left side for a customized solution to the export market. As with all Flaming River tilt columns, this has all-new components and is manufactured with all stainless steel. Made in the U.S.A.





| Part No | Finish |
|-----------|------------------------|
| FR21230 | 30" Mill Stainless |
| FR21230BK | 30" Black Powder coat |
| FR21230SS | 30" Polished Stainless |
| FR21230XX | Custom Length |









NEW PRODUCT

17" Length

Flaming River offers a new Collapsible Gearshift Micro Column. This design is only 17 inches long to allow for optimal clearance and, best of all, the laser cut diamond pattern is added for collapsibility. In creating custom builds, this allows a key safety feature. The product was requested by an Australian builder and Flaming River responded to the request. As with all Flaming River tilt columns, this is all new components and stainless steel. Made in the U.S.A.



| Un-Collapsed | Collapsed |
|--------------|-----------|
| | |

| | Part No | Finish |
|---|---------------|--------------------|
| \ | FR20020MCLC | Mill Stainless |
| | FR20020MCLCBK | Black Powder coat |
| | FR20020MCLCSS | Polished Stainless |

HICRO/DASH HICUNT





Micro Tilt Steering Columns

Available in Floor Shift and Column Shift designs, our Micro Columns are ideal for a variety of vehicle applications. At only 17" in length - these columns add tilt functionality, reduce universal joint angles, and remove the tube from the engine compartment for added clearance and safety. Available in Paintable, Black Powder coat and Polished finishes.

Floor Shift

| Part No. | Finish |
|------------|-------------------------|
| FR2000MC | Mill Stainless |
| FR2000MCSS | Polish Stainless |
| FR2000MCBK | Black Powder coat |

Column Shift

| Part No. | Finish |
|-------------|-------------------------|
| FR20020MC | Mill Stainless |
| FR20020MCSS | Polish Stainless |
| FR20020MCBK | Black Powder coat |

Check out our VDOG Variable Angle Gear for Additional Angle Options p. 98





Our 7-1/2" Dash Mount Tilt Columns eliminate pedal interference by taking the column tube out of the engine compartment. This column offers all of the features of our standard Tilt Columns, but gives you maximum design flexibility. No need for a mounting bracket, as this column includes a face plate for mounting. Output shaft is 3/4" DD. Available in Paintable, Black Powder coat and Polished finishes.

| Part No. | Finish |
|-------------|-------------------|
| FR20020DM | Mill Stainless |
| FR20020DMSS | Polish Stainless |
| FR20020DMBK | Black Powder coat |

CUSTOM COLUMNS FOR ELECTRIC POWER STEERING

Gearshift and Floorshift EPAS Columns

Flaming River now manufactures a selection of tilt columns to be used with Electric Power Steering by EPAS Performance.

Columns are available for the 57 Chevy, 69-82 C3 Corvette and 68-69 Mustang, in Polished Stainless, Chrome, Black Powdercoat or Paintable Mill Finish.

Please Note: We only build these columns. You or your mechanic must assemble with the EPAS unit which is sold separately by EPAS Performance. The columns are non-returnable.



| | EPAS Columns | |
|---|---------------------|---|
| | FR2000EPAS57 | 57 Chevy Floor Shift - Paintable Mill Finish |
| | FR2000EPAS57SS | 57 Chevy Floor Shift - Polished Finish |
| | FR2000EPAS57BK | 57 Chevy Floor Shift - Black Powdercoat Finish |
| | FR2000EPAS57GS | 57 Chevy Column Shift - Paintable Mill Finish |
| Ì | FR2000EPAS57GSPL | 57 Chevy Column Shift - Polished Finish |
| | FR2000EPAS57GSBK | 57 Chevy Column Shift - Black Powdercoat Finish |
| | FR2000EPAS-C3 | 69-82 Corvette - Paintable Mill Finish |
| | FR2000EPAS-C3PL | 69-82 Corvette - Polished Finish |
| | FR2000EPAS-C3BK | 69-82 Corvette - Black Powdercoat Finish |
| ŕ | FR2000EPAS3 | 68-69 Mustang - Paintable Mill Finish |
| | FR2000EPAS3BK | 68-69 Mustang - Polished Finish |
| | FR2000EPAS3SS | 68-69 Mustang - Black Powdercoat Finish |



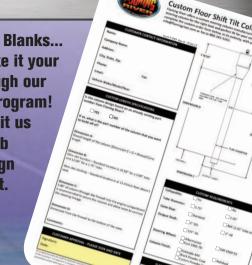


GUSTOM GOLUMES

Chances are good that we have a column to fit your steering needs. One of our friendly Sales reps can recommend a column for your specific vehicle, or help you build a perfect fit through our Custom Column Manufacturing Program. We can custom build a Non-Tilt Roadster Column, Floor Shift Tilt Column, Column Shift Tilt Column, or Tilt Key Column to your exact specifications!

If you're interested in building a Custom Column, please review the appropriate custom column order forms on our website and then contact one of our Sales Reps. They'll take down your information, make sure they understand what you're looking for, and then we'll take care of the rest.

Fill In The Blanks...
We'll make it your
way through our
Custom Program!
Call or visit us
on the web
for a design
worksheet.



Wiring Slot Locations

| 2" Dia Floor Shift | 16.5" |
|--|--------|
| 1-3/4" Dia Floor Shift | 12.25" |
| Column Shift (with or without Neutral Safety Switch) | 16" |
| Floor Shift or Column Shift Key Columns | 16" |

Forms Available Online



Output Shaft (1" DD, 1"-48 or 3/4"-36) Amount of Shaft Through Firewall (3" Recommended) Wiring Slot
Location
(See Chart Above)

Column Specifications:

Tube Diameter (1 3/4" or 2") Golumn Style (Floor Shift, Column Shift or Roadster)

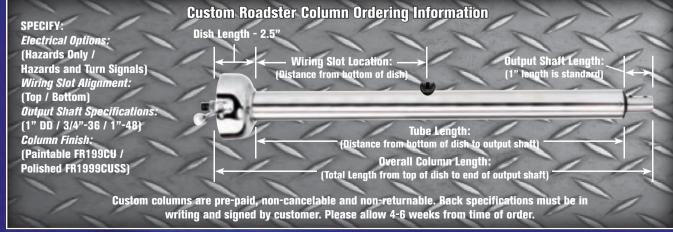
Distance from Firewall to Bottom of Cone

Overall Column Length (End of Column Shaft to Top of Shroud)

Steering Wheel Type: Aftermarket, GM 69-93 or Ford 65-70

Mill Finish (Paintable), Black Powder Coat, Polished (Stainless) or Custom Powdercoat from RAL Deck





PROGRAMMABLE KEYLESS IGNITION SYSTEM



| Part No. | Description |
|--------------------------------|--|
| FR60004 | Programmable Keyless Ignition System - Dash mount |
| FR60005 | Programmable Keyless Ignition System - Floor Shift Column Paintable |
| FR60006 | Programmable Keyless Ignition System - Column Shift Column Paintable |
| FR60007 | Programmable Keyless Ignition System - Street Machine Style Column Paintable - FR21019,FR21020 Style Steering Columns |
| FR60008 | Programmable Keyless Ignition System - Street Machine Style Column Paintable - FR30009 Style Steering Columns |
| FR60101 | Programmable Keyless Ignition System 33" Standard Length Touch Start Muscle Car Column - Paintable Mill Finish |
| FR60101SS | Programmable Keyless Ignition System 33" Standard Length Touch Start Muscle Car Column - Polished Finish |
| FR60101BK | Programmable Keyless Ignition System 33" Standard Length Touch Start Muscle Car Column - Black Powdercoat Finish |
| Add. DV for Diock Douglas cook | |

Add: BK for Black Powder coat, CLR for Custom Powder coat Color SS for Polished Stainless

Note: Columns are built to order. Customer must specify length, tube diameter and output shaft size.

NON-RETURNABLE

Start Your Car With The Simple Push of a Button!

- Comes with 2 key fobs and 5 programmable channels.
- Four channels are user programmable for Keyless Entry, Shaved Door "Pop", Trunk Release, and Automatic Window Roll Up.
- A 5th "proximity Channel" activates automatically as you approach your vehicle.
- 22mm brushed stainless start button with LED emulates all functionality of a traditional Key Switch.
- Emergency bypass Card with unique PIN# assures you can always start your vehicle.
- Advanced System Control Module has 60 Amp Ignition and 2 Accessory Circuits.
- Features Programmable Starter Delay and built in MSD™ Ignition filtering system.
- 100% American Made!







Memory circuit included with all power units.

- Memory control for Driver 1 or Driver 2 positioning
- Unique design telescopes from the tube for driver comfort
- Smooth linear activating device with stainless cable positions the column
- Stainless steel piston and sleeve CNC machined for smooth action
- 2 inch range of linear movement



Telescopic Roadster Column - FR1990TEPL The ultimate in adjustability!

A nostalgic look with a sleek telescoping tube that makes driving your Roadster much more comfortable. Available in Polished Stainless with a 2" tube diameter and 30" length. Note: Custom Column Drop required and sold separately.

| Power | | |
|-----------|------------|---------------------------|
| Part No | Length | Finish |
| FR20011 | 30-32 Inch | Mill Stainless |
| FR20011PL | 30-32 Inch | Polished Stainless |
| FR20012 | 32-34 Inch | Mill Stainless |
| FR20012PL | 32-34 Inch | Polished Stainless |



Telescopic Column Drops

A machined knob locks the column in position when used in conjunction with our Manual Telescopic Steering Columns. Available in 2" diameter, our polished column drops are available from 2-1/2" to 6-1/2" in length. Add TS to part no. of column drop when ordering.

| | Manual | | |
|---|-------------|------------|---------------------------|
| | Part No | Length | Finish |
| | FR20005TS | 30-32 Inch | Mill Stainless |
| | FR20005TSPL | 30-32 Inch | Polished Stainless |
| - | FR20006TS | 32-34 Inch | Mill Stainless |
| | FR20006TSPL | 32-34 Inch | Polished Stainless |





RECREATIONAL

Flaming River Tilt Steering Columns - Add Comfort and Style to Your "Other" Ride! Perfect for boats, golf carts, pit carts, and other custom carts.

All stainless...Same as original column with 1-3/4" tube diameter 5 position tilt for driving comfort Built-in turn signal, hazards, and horn relay. Easy mounting using existing universal joint. Accepts aftermarket adapter for use with any steering wheel.

| Tilt Steering Columns | |
|-----------------------|--|
| Part No. | Description |
| FR20011GOSS | 01-UP EZ GO (4 Bolt) |
| FR20010GOSS | 96-01 EZ GO (3 Bolt) |
| FR20012GOSS | 92-03 Club Car |
| FR20012PR | Precedent Club Car Column |
| FR20012PRSS | Precedent Club Car Column - Polished Finish |

| Installation Accessories | |
|--------------------------|---|
| Part No. | Description |
| FR1978 | 3/4"DD x 16.5MM-36 Chrome Moly U-Joint |
| FR1934 | 1"DD x 3/4"DD Chrome Moly U-Joint |
| FR1850 | 18" DD Steering Shaft |

Precedent Column

Custom Applications
Also Available



This golf cart dress up kit includes a 5/6 bolt wheel adapter and polished stainless tube with bushings. It provides your existing straight column a streamlined appearance with the addition of any popular 5 or 6 bolt aftermarket steering wheels. Steering wheel not included.

| Golf Cart Dress Up Kit | | | |
|------------------------|------------------|--|--|
| Part No. | Description | | |
| FR400KT | Dress Up Kit | | |
| FR20014AD | 5/6 Bolt Adapter | | |



Slip Fit Tilt Steering
Column Conversions
Designed to slide over the existing
steering column tube and add tilt
steering to any Club Car or utility cart.
Steering wheel not included.

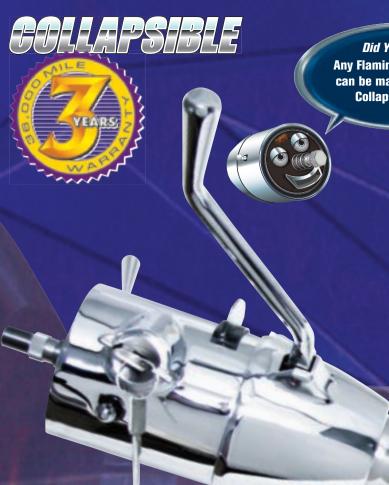
| Slip Fit Tilt Steering Columns | | | | |
|--------------------------------|------------------------------|--|--|--|
| Part No. | Finish | | | |
| FR20014EZ | Polished Stainless St | | | |



teel

FLAMING RIVER

Chrome Moly U-Joint



Did You Know? Any Flaming River® Column can be manufactured as a Collapsible Column





Un-Collapsed

Collapsed

| O.D. x Length | Shaft Size | Mill Finish | Black Powder coat | Polished Stainless | | |
|---------------------------|------------|--------------|-------------------|--------------------|--|--|
| Tilt Floor Shift (No Key) | | | | | | |
| 2 x 30 | 1 Inch DD | FR20005LC | FR20005LCBK | FR20005SSLC | | |
| 2 x 32 | 1 Inch DD | FR20006LC | FR20006BKLC | FR20006SSLC | | |
| 2 x 35 | 1 Inch DD | FR20007LC | FR20007LCBK | FR20007SSLC | | |
| Tilt Key Floor Shift | | | | | | |
| 2 x 30 | 1 Inch DD | FR30001-30LC | FR30001-30BKLC | FR30001-30SSLC | | |
| 2 x 32 | 1 Inch DD | FR30001-32LC | FR30001-32BKLC | FR30001-32SSLC | | |
| 2 x 35 | 1 Inch DD | FR30001-35LC | FR30001-35BKLC | FR30001-35SS | | |

Also available on Roadster Style Columns (See website for details)



Most Flaming River columns can be built with the Collapsible optionn through our custom column program

Flaming River pioneered the Laser Cut Stainless Tilt
Steering Column using all-new parts. Continued
investment and growth in our manufacturing
processes, including our laser technology, allows
us to manufacture precision parts with maximum
flexibility. A bellowed diamond pattern is laser cut into
our Collapsible Columns for both style and safety. Our
Collapsible Columns also include a collapsible center
shaft and are available as Tilt Columns, "Roadster"
nostalgia columns and our Trim line Race Columns—
voted Best New Safety Product by NSRA.

- Intricate laser cut pattern which enables the tube to fold upon impact with up to 4 inches of collapsibility.
- Added safety yet maintains an attractive appearance
- Meets Australian Collapsibility Requirements





| O.D. x Length | Shaft Size | Mill Finish | Black Powder coat | Polished Stainless |
|--|------------|--------------|-------------------|--------------------|
| Tilt Column Shift (No Key) | | | | |
| 2 x 30 | 1 Inch DD | FR20021LC | FR20021BKLC | FR20021SSLC |
| 2 x 33 | 1 Inch DD | FR20022LC | FR20022BKLC | FR20022SSLC |
| 2 x 35 | 1 Inch DD | FR20029LC | FR20029BKLC | FR20029SSLC |
| Tilt Key Column Shift (Neutral Safety Switch Included) | | | | |
| 2 x 30 | 1 Inch DD | FR30101-30LC | FR30101-30BKLC | FR30101-30SSLC |
| 2 x 33 | 1 Inch DD | FR30101LC | FR30101BKLC | FR30101SSLC |
| 2 x 35 | 1 Inch DD | FR30101-35LC | FR30101-35BKLC | FR30101-35SSLC |

STEERING COLUMN MANUFACTURING





AHATOMY OF A GOLUMN



DESIGNING YOUR SYSTEM

What makes Flaming River® unique is that we have designed a complete steering system. From the Steering Wheel, to the Steering Column, through the Universal Joints, and down to the Rack and Pinion or Steering Box.



To make your installation as simple as possible, we recommend the following items:

Installation Kits:

Mustang Long Shaft Column Install Kit - FR200MUKT Mustang Short Shaft Column Install Kit - FR200MUKT2

Column Shift Tilt Columns:

Optional Overdrive Lens - FR20010LNO

Floor Mounts:

Polished Floor Mount 1-3/4" Dia. – FR20100 Polished Floor Mount – 2" Dia. – FR20101 Floor Mount Firewall Cover – FR20100CVR

Column Mount:

OEM Factory Style Dash Mount for Classic Columns – FR20114

Column Drops:

For 2" or 1-3/4" tube diameter

Steering Wheel Adapters:

Universal 5 and 6 Bolt Wheel Adapters contain the pattern for both 5 and 6 bolt wheels in a contemporary tapered or bell-style design. These adapters are only 3.90" wide for a seamless fit to our Steering Columns. Also available in larger diameter for GM style.

Flaming River Shroud/Cone Measurements

| | | Shroud | Cone |
|---|------------------------------------|--------|--------|
| | Floor Shift/Column Shift (Non-Key) | 3-5/8" | 3-1/2" |
| ٩ | Key Columns | 4-1/8" | 3-1/2" |
| Ì | '57 Chevy Columns | 3" | 3-3/8" |
| | Roadster Tilt Columns | 3" | 2-1/2" |
| ~ | Roadster Non-Tilt Columns | N/A | 2-1/2" |



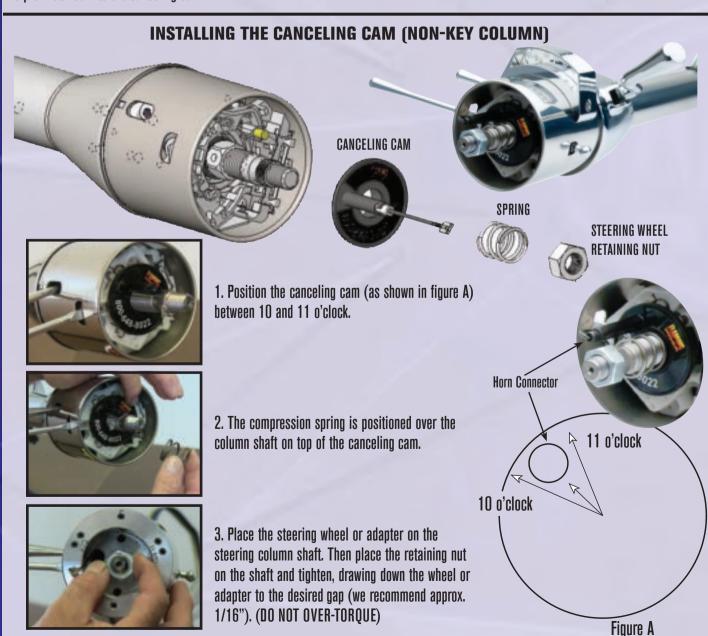
TILT STEERING COLUMN INSTALLATION

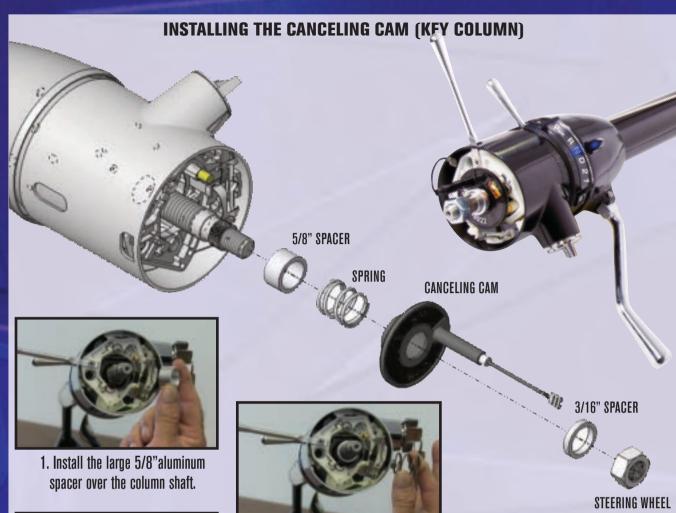
- 1. Determine the floor mount you intend to use and dash board clamp or column drop.
- 2. Position the floor mount at the bottom of the steering column. Do not fully tighten the mount until the column is in its final position.
- 3. Install the column in the vehicle and install the dash clamp or column drop to hold the column in place. Next, re-adjust floor mount to fit snug to the floor and make any final adjustments before tightening all the clamps.
- 4. Install the turn signal arm using the phillips screw provided. Then the tilt arm, and finally the hazard knob using the allen screw provided.
- 5. Connect the GM 4-1/4" male plug to your vehicle wiring harness.

NOTE: Ignition Rod must move free and clear to function.
Please make sure it is not binding in your column mount.

INSTALLING THE STEERING WHEEL

The spline on your new Flaming River steering column is a GM spline designed from 69 to present steering wheels without an airbag. The horn wire is furnished with your steering column and is pre-installed into the canceling cam.







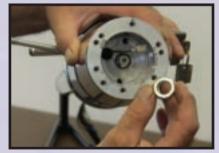
3. Then, slide the Canceling Cam over the column shaft and canceling cam spring.

For proper operation of the canceling cam, align the canceling cam stem between the 10 and 11 o'clock position. (figure A)



2. Next install the Canceling Cam

4. Place the final 3/16" aluminum spacer over the column shaft and down to the canceling cam.



RETAINING NUT

5. When installing your steering wheel adapter, tighten the retaining nut to 50 ft lbs.

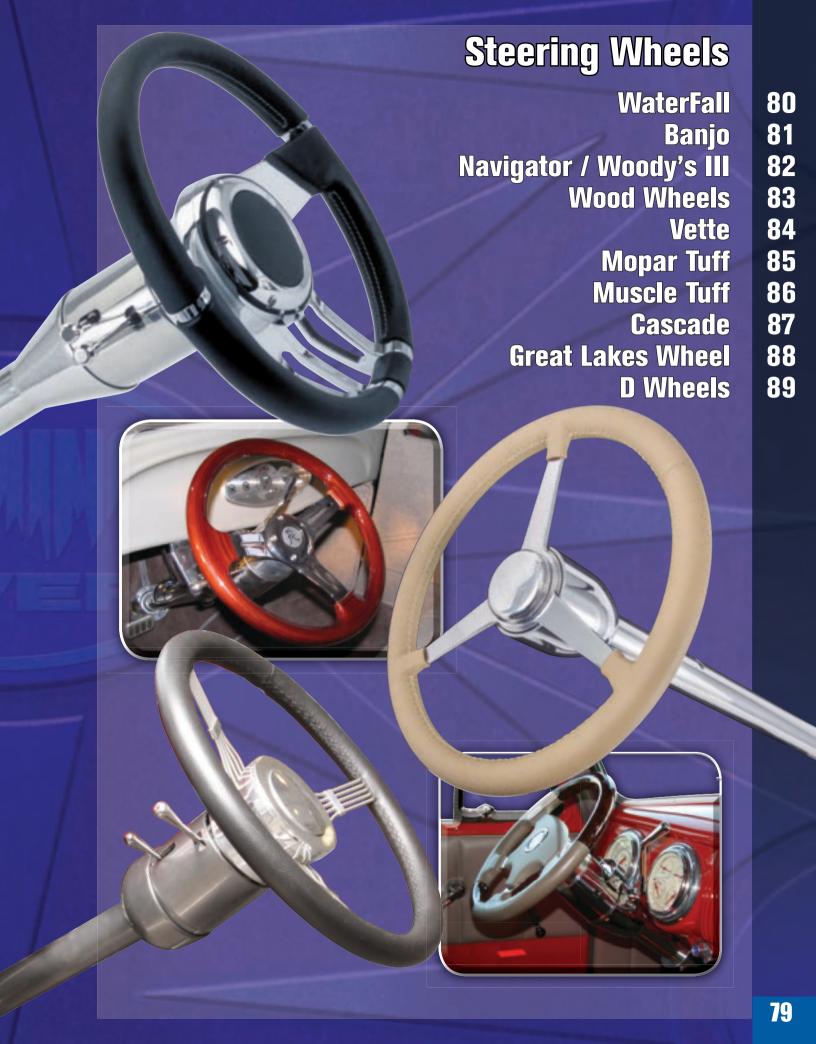
IMPORTANT: (FOR KEY AND NON-KEY COLUMNS)

A spring-loaded horn contact connects to the underside of the canceling cam. —
When connecting the canceling cam to your horn button, please note:
The BLACK WIRE is only designed for momentary ground to trigger a horn relay.

DO NOT connect voltage to the BLACK WIRE, or permanent damage to the column wiring or other components will occur.











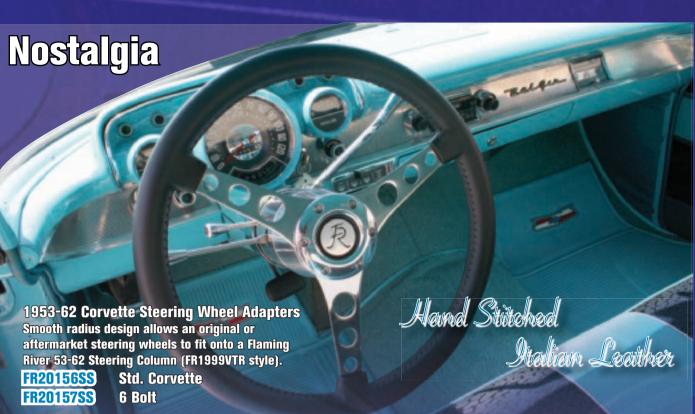
FR20113LHN Shown Installed In FR20128BJLT



FR20128BJLG Banjo Light Gray Leather







Part No. **Description** Nostalgia / Corvette Steering Wheels Molded FR20151HRN **Steering Column Access: Horn Button Assembly** FR20171BK "Leather Like" Molded Black with **OE "Vette" Bolt Pattern Center** "Leather Like" Molded Black with FR20172BK FR 6 Bolt Pattern Center "Leather Like" Molded Black with FR20173BK FR 6 Bolt Pattern Powder Coat **Black Center**

| Part No. | Description | |
|---|---|--|
| Nostalgia / Corvette Steering Wheels Italian leather | | |
| FR20152BK | Vette 6 Bolt Laser Chrome 15" (Black Leather) | |
| FR20152LG | Vette 6 Bolt Laser Chrome 15" (Light Grey Leather) | |
| FR20152RE | Vette 6 Bolt Laser Chrome 15" (Red Leather) | |
| 53-62 Corvette Steering wheel adapters | | |
| FR20156SS | Wheel Adapter: Vette "Bell" Vette bolt pattern | |
| FR20157SS | Wheel Adapter: Vette "Bell" 6 bolt pattern | |



Tuff Wheels for Mopar

The popular Mopar "Tuff" Wheel is becoming more and more popular in muscle cars. Our Tuff Wheel features hand-stitched Italian leather. This wheel also comes complete with a horn button and cover. 14" diameter.

| Part No. | Description |
|------------|--|
| FR20161 | New Leather Style 14" Tuff Wheel Chrome (Black) Polished Aluminum Spokes |
| FR20161LT | New Leather Style 14" Tuff Wheel Chrome (Light Tan) Polished Aluminum Spokes |
| FR20161AD | Wheel Adapter: For Tuff Wheel to FR Tilt column |
| FR20161CAP | Steering Wheel Access: Mopar "Tuff" Horn Cap |



Hand Stitched

Tuff Wheel Horn Cover included with Wheel FR20161CAP

Stalian Leather



Mopar Canister Wheel Adapter FR20182

Tuff Wheel Adapter A custom Wheel Adapter enables our Tuff Wheel to mount on a Flaming River Tilt Column. FR20161AD

Tuff Wheel & Adapter mounted onto a Flaming **River Mopar Tilt Column**



Muscle Tuff Wheel

The popular "Tuff" Wheel is becoming more and more popular in muscle cars. Our Muscle Tuff Wheel features hand-stitched Italian leather. This wheel also comes complete with a horn button and cover. 14" diameter. Includes billet polished aluminum Horn Button Assembly.

| Part No. | Description |
|-----------|--|
| FR20174KT | 14" Muscle Tuff Wheel with 9 Bolt Adapter and Polished Horn Button |
| FR20113 | 9 Bolt Wheel Adapter |

Hand Stitched Stalian Leather

- 14" Diameter
- Includes 9 Bolt Wheel Adapter
- Includes Polished Horn Button
- Chrome Spokes
- Molded Comfort Grip

9 Bolt Adapter (Included) FR20113

If It Doesn't Say Flaming River...
It Just Isn't Good Enough!





Great Lakes Roadster Wheel

Hand Stitched Italian Leather

This is a Roadster Style Wheel,
The Horn Button is decorative (Non-Functioning)

Part No. Description FR20175BK Great Lakes Roadster Wheel - Black FR20175LT Great Lakes Roadster Wheel - Light Tan

FR20175LT

Great Lakes Wheel-Light Tan 14" Dia. / 3 Bolt



FR20119

Billet Roadster Column Steering Wheel Adapter

> New Great Lakes Roadster Wheel Installed on Nostalgia Roadster Column



Accessories

Electrical Accessories 91
Wheel Adapters 92-93
Column Accessories 94
Column Mounts 95
Column Drops 96
Floor Mount Replacement 97
Systems



Column Dress Up Kits







FR20122AL Mill Finish

FR20122BK Black Powdercoat Finish

Electrical Accessories

Description



| | Ignition System - Dash mount |
|---------|---|
| FR60005 | Programmable Keyless Ignition System - Floor Shift Column Paintable |
| FR60006 | Programmable Keyless Ignition System - Column Shift Column Paintable |

Programmable Keyless

Programmable Keyless Ignition System



Part No.

FR60004





Cruise Control Kit
This aftermarket cruise control
kit, with a GM style lever, can be
installed on your Flaming River Tilt
Column. Note: For vehicles with
non-computer engines only. Order
this when you order your Flaming
River column and we will install it
for you. Non-returnable.
FR20118-4



Dimmer Switch Kit
Turn signal lever can be ordered
with a discreet micro switch. A
relay master unit is included for
high beam/low beam operation.
Note: Installed on column only.
Order this when you order your
Flaming River column and we will
install it for you. Non-returnable.
FR20118-3



Female Wiring Connector
Kit (4-1/4")
Female plug for Flaming River Tilt
Columns. Supplied with terminals
and can be used to adapt any existing wiring harness to mare with
Flaming River 4-1/4" connector.

Spring-loaded horn wire and canceling cam are included with every Flaming River Tilt Column
FR20120HN
FR20024SP

Canceling Cam / Horn Contact



Neutral Safety Switch
A Neutral Safety Switch is
recommended for all Column Shift
style columns. Add "NE" to end of
part number when ordering. Must
be ordered with column.



Hazard Kit (4-Way Flashers)
Designed for pre-1969 vehicles,
this Flasher Kit is available for
vehicles that were not originally
equipped with 4-Way Flashers.
Includes flasher, female adapter,
and terminals.

FR20118-1



Female Wiring Connector Kit
(67-68 Camaro)

Horseshoe-shaped connector used in 1967-68 Camaro. (FR20118 Plug Adapter could be used in place of this adapter).

FR20118-2

Wheel Adapters



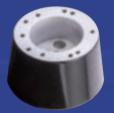
Polished Horn Button fits
9 Bolt Wheel Adapter

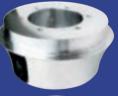
Polished Aluminum Wheel Adapters with a 2-1/2" total height, fit perfectly with Flaming River Tilt Columns and Steering Wheels. This adapter actually fits on the column shroud for a "seamless appearance."















| Tapered Style 5/6 Bolt Pattern - 2-1/2" Tall | | |
|---|--------------------------------|--|
| FR20119TA | FR Column | |
| FR201190E | GM Column | |
| FR201190EBK | GM Column Satin Black | |
| FR20119TA-BK | FR Column Satin Black | |
| FR20119TA-CLR | FR Column Clear Powder coat | |
| FR20119TAS | FR Column Satin Finish | |
| FR20119FD | FR Ford Column | |
| FR20143 | 67 & Prior GM Columns | |
| FR201440E-M | Motolita Wheel To GM Column | |

| Adapter - 2-1/2" Tall | | |
|-----------------------|--------------------------|--|
| FR20150HGAD | FR Column | |
| FR201500E | GM Column | |
| FR20150M69 | Dodge 1966-69 | |
| FR20150M70 | Dodge 1970-75 | |
| FR20150GM | 67 & Prior GM Columns | |
| FR20150FD | FR Ford Column | |

WaterFall Steering Wheel

| 9 Bolt Pattern - 2-1/2" Tall | | |
|------------------------------|---|--|
| FR20113 | FR Column | |
| FR20113BK | FR Column Satin Black | |
| FR20113FD | FR Ford Columns | |
| FR201130E | GM Column | |
| FR20145 | Billet Specialties Wheel to FR Tilt Column | |







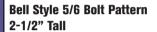






Billet Roadster Column Steering Wheel Adapter

| FR20119 | 3 to 5/6 Bolt |
|---------|---------------|
| | Adapter |



Low Profile 5/6 Bolt Pattern 1-7/8" Tall

3 Bolt Steering Wheel Adapter - 2-1/2" Tall

| FR3302 | FR Column |
|----------|-------------------------------------|
| FR33020E | GM Column |
| FR3302FD | FR Ford Column |
| FR3304 | Roadster Column |
| FR3304BK | Roadster Column - Satin Black |

1953-62 Corvette Steering Wheel Adapters for Flaming River FR1999VTR Columns 1-13/16" Tall

| FR20156SS | Original Vette |
|-----------|-------------------------|
| FR20157SS | Aftermarket 5/6 Bolt |

Wheel Adapters



Tuff Wheel Adapter 1-13/16" Tall

FR20161AD Flaming River Tilt Column



1970-74 Mopar "E" Body Steering Columns.

FR20119D0 5/6 Bolt Patterns
FR20119D02 WaterFall Wheel



Cascade Wheel Adapter 2-1/2" Tall

FR20160AD FR Tilt Column
FR20160ADOE GM Column



1966-69 Mopar 3-1/4" Tall

FR20180 5/6 Bolt



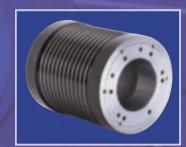
Corvette Wheel Adapter to a Flaming River Tilt - 2-1/2" Tall

FR2000VT-ADBK Satin Black



1970-75 Mopar - 3-1/4" Tall

FR20181 5/6 Bolt



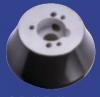
NEW Mopar Canister Wheel Adapter

FR20182BK Flaming River Tilt Column -Satin Black

Muscle-Series Satin Black Wheel Adapters



Tapered Style 5/6 Bolt Pattern FR20119TA-BK



3 Bolt Pattern (Roadster Column) FR3304BK



3 Bolt Pattern (FR Column) FR3302BK



5/6 Bolt Pattern (Roadster Column) FR20119RA-BK



9 Bolt Pattern FR20113BK



Cascade FR20160BK



Waterfall FR20150HGADBK

Column Accessories

Patent #D615.466 **Billet Dress Up Kit** Sleek one-piece design now included with all Tilt Steering Columns. Kit includes turn signal lever, tilt lever, and hazard knob. Available in Mill, Polished, and Black Powder coat finishes.

| Finish | Original Style | Machined Style | |
|----------|----------------|-----------------------|--|
| Satin | FR20112AL | FR20121AL | |
| Polished | FR20112ALP | FR20121APL | |
| Black | FR20112BK | FR20121BK | |





Billet Aluminum Linkage Kit

This adjustable kit connects and aligns a gearshift arm to a GM automatic transmission. Includes adjustable billet aluminum arm, two adjustable Heim-style connectors, a shift rod, and all mounting hardware.

FR20010RK2 6 Speed Transmission FR20010RK(3/4 Speed Transmission



Cable Shift Linkage kit

Cable Shift Linkage is the ultimate answer to clearance issues. The cable allows you to route around transmissions, exhaust, cross members and brake pedals. Can be used on either side of the column. The cable has a Teflon-lined black housing with stainless inner-wire, measuring 5 ft. in length. Ready-to-install hardware and brackets included in kit - no cutting or measuring.

FR20010CBL





innovation AWARD

Stainless Steel Linkage Kit This linkage kit connects the column or floor shifter to almost any GM transmission and allows for easy gear pointer alignment.

FR20010LK FR20010LK-S



Shift Indicator Adjustment Kit

con munit This sliding linkage arm allows for perfect alignment of your transmission with your steering column indicator. The machined sliding mechanism locks into position at the exact

location you need for any transmission. The precision machined bushing design can be reversed to increase the range of motion.

FR20059

Indicator housing, lens and pointer included with each column at no additional charge.

| Part No. | Description |
|----------------|--|
| FR20010-KITC | Chrome Indicator housing, Pointer and Lens |
| FR20010-OVKITC | Chrome Indicator housing, Pointer and Overdrive Lens |
| FR20010LNO | Overdrive Lens |
| FR20010P0 | Pointer |

Mounting Clamps (Under OEM Dash)
These billet aluminum clamps can be used with virtually all OEM applications to facilitate installation of a Flaming River Tilt Column into a vehicle's existing dash.

FR20114 - 2" Dia FR20114-2 - 1 3/4" Dia

FR20114K - Key Column

FLAMING RIVER

Column Mounts







FR20114FD - Satin FR20114FDPL - Polished FR20114FDBK - Black Powdercoat

1965-70 Mustang Dash Mount Clamp

Flaming River has designed a replacement dash mount clamp for installing a Flaming River tilt steering column into a 1965-70 Mustang. This two-piece billet aluminum clamp fits in the factory column mounting location and firmly secures a new tilt column into place.

Ignition Switch with Column Mount

A new billet aluminum column mount with ignition key provides a stylish way to mount your column and key. The reversible design can mount the key on either the left or right side of the column. FR20114KYPL

Billet Dash Mount with Ignition Key

Relocate your ignition switch to underneath the dash with this stylish billet aluminum mount. It easily bolts to the stock dash for convenient mounting in Jeeps, Camaros, Chevelles, Street Rods, and limitless other applications. Ignition switch and boot included. FR20114KY-2PL (Shown with Shim FR20114SH-2)

| Part No. | Description |
|---------------|---------------------------------------|
| FR20114KYPL | Column Mount with Ignition |
| FR20114KY-2PL | Column Mount with Ignition & 12V Acc. |
| FR20114SH-1 | Shim to drop 3/4" |
| FR20114SH-2 | Shim to drop 1-1/4" |
| FR20114SH-3 | Shim to drop 2" |



Dual Column Mount with 12V Accessory

This mount not only provides a convenient mount for your ignition but also includes a 12 Volt Adapter to keep your cell phone or other vehicle accessory charged while you're on the road. Can also be used to mount headlight switch in place of 12 Volt outlet. A protective rubber boot for the ignition switch is included.





| Part No. | Description |
|------------|--|
| FRIGN4-1 | Dual Mount Mill Finish - Billet Mount Only |
| FRIGN4 | Dual Mount Mill Finish |
| FRIGN4-1PL | Dual Mount Polished - Billet Mount Only |
| FRIGN4PL | Dual Mount Polished |
| FRIGN3-1 | Single Mount Mill Finish - Billet Mount Only |
| FRIGN3 | Single Mount Mill Finish - with Key |
| FRIGN3-1PL | Single Mount Polished - Billet Mount Only |
| FRIGN3PL | Single Mount Polished - with Key |

Column Drops



Slanted Dash Mount

Measure from the top of the hinge to center of the column drop



Flaming River's Column Drops feature a sleek, hinged design. These are machined from billet aluminum with a smooth radius edge and are available in a satin or polished finish. Choose 1-3/4" or 2" diameter to fit all Flaming River columns.

| Size Drop | 1-3/4" Dia | 2" Dia | Key Column |
|-----------|------------|---------|------------|
| 2-1/2" | FR20102 | FR20107 | FR20107K |
| 3-1/2" | FR20103 | FR20108 | FR20108K |
| 4-1/2" | FR20104 | FR20109 | FR20109K |
| 5-1/2" | FR20105 | FR20110 | FR20110K |
| 6-1/2" | FR20106 | FR20111 | FR20111K |

Add PL for Polished

Polished Open Column Drop
Machined from billet aluminum with a
smooth radius edge. Measure from top
of hinge to center of column opening to
determine what length you need

| Size Drop | Diameter | Part No. | |
|-----------|----------|--------------|--|
| 5-1/2" | 1-3/4" | FR20105-COPL | |
| 6-1/2" | 1-3/4" | FR20106-COPL | |

8 Degree Mounting Angle

Slanted Dash Mount

Fits vehicles with a slanted dash, including the 1932 Ford Roadster.

| Part No. | Description |
|----------------|---|
| FR20109PL-8DEG | 2 in. Dia. 4-1/2 in. length 8 Degree Mounting Angle Polished |
| FR20110PL-8DEG | 2 in. Dia. 5-1/2 in. length 8 Degree Mounting Angle Polished |

Polished Floor Mount

Billet Aluminum Swivel Design Floor Mount with a ball and collar design, simplifies column installation by allowing up to 60° angle. Available in both 1-3/4" and 2" diameter to fit all Flaming River column styles. Polished finish. For a finishing touch, add our Floor Mount Firewall Cover

Floor Mount Firewall Cover
Polished aluminum cover to finish the
engine side of the floor mount. Conceals
the screws for a finishing touch.

| Part No. | Description |
|--------------|---------------------|
| FR20100 | 1-3/4" Floor Mount |
| FR20101 | 2" Floor mount |
| FR20100CVR | Floor Mount Cover |
| FR20100CVRBK | Floor Mount Cover - |
| 1000 | Black Powdercoat |

BLANK Universal Swivel SLATE Floor Mount

This universal floor mount is designed to be used in a street rod build that will include a new firewall. It is a standard rectangular shape with a swivel floor mount included for easy 2 inch column mounting. This "Blank Slate" design works nicely for the builder installing a column that would like to customize with their own mounting holes. The Blank

Slate fills the gap nicely and allows for true customization.

Made in the U.S.A. FR20101BLS









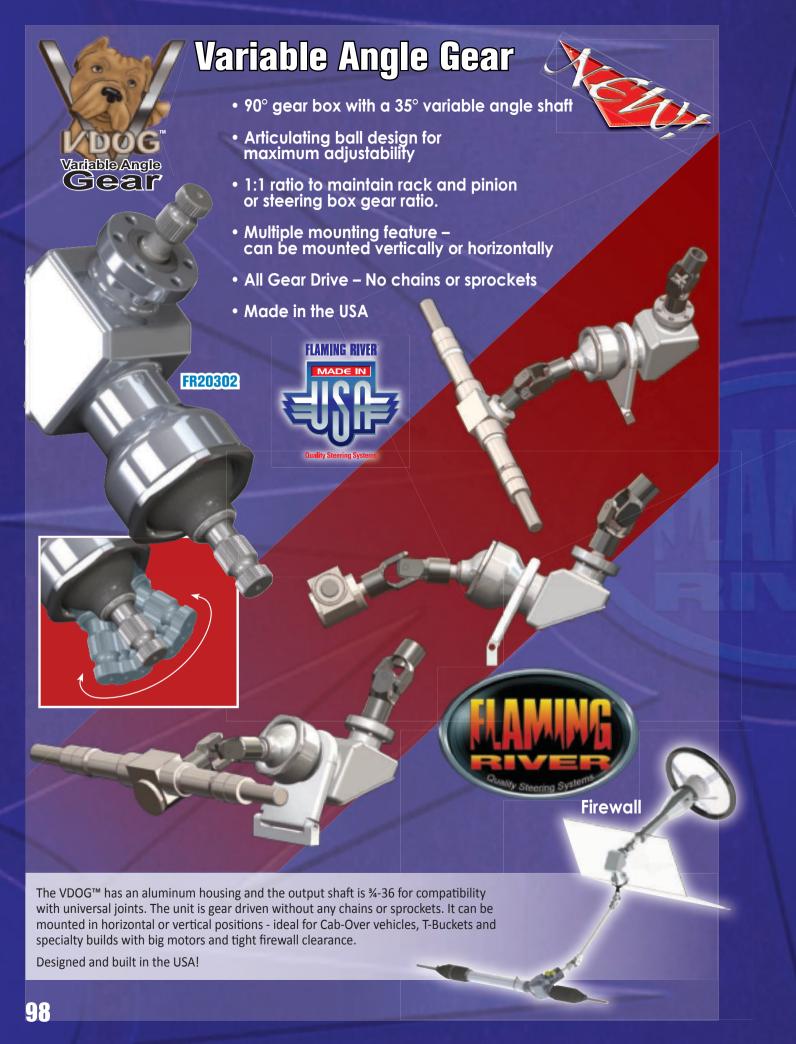
1960-65 Comet/Falcon 70-74 Mopar E-Body FR20097

FR20101MPE

62-69 B-Body Mopar FR20101MP

A-Body Mopar FR20101MPA

79-86 Jeep CJ Series FR20101CJ



Steering Boxes & Racks

| Application | Size | Spline Dia. | Spline |
|---|---|------------------------------|--------------------------|
| Ford Rack Mustang II & Pinto Manual Mustang II & Pinto Power | 9/16"-26 3/4"-36 | .563 .750 | 26 36 |
| Ford Box Manual & Power | 3/4"-36 | .750 | 36 |
| GM Box Manual Vega Corvair Corvette (63-68) Corvette (69-82) Model 122 (65-85) | 5/8"-36 5/8"-36 3/4"-36 3/4"-30 3/4"-30 | .625 .625 .750 .750 | 36 36 36 30 |
| Model 525 (86 - Present) | 3/4"-36 3/4"-30 | .750 .750 | 36 30 |
| GM Power Box Model 605 (78-84) Model 800 (77-Prior) Model 800 (78-Present) | 3/4"-30 13/16"-36 3/4"-30 | .750 .813 .750 | 30 36 30 |
| GM Rack 79-Present Variations Corvette (84-Present) Fiero | 5/8"-36 3/4"-30 17MM DD 17MM DD | .625 .750 .670 .670 | 36 30 .570 .570 |
| Chrysler Box or Rack Omni Manual Omni Power Power Box Manual Box | 9/16"-26 9/16"-36 5/8"-36C 3/4"-36 | .563 .563 | 26 36 36 36 |
| Misc. Jaguar & MGB VW Rabbit - Diesel BMW | 3/4"-48 3/4"-36 17MM-54 | .750 .750 .670 | 48 36 54 |



Universal Joint Yoke Shapes Shown Below: (To be determined by individual applications)



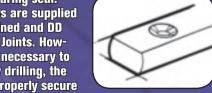
Tech Tips

Six Simple Steps for Ordering a Flaming River Steering System:

- 1. Choose the type of intermediate shaft you will be using-Splined or DD. This will determine one side of the Universal Joint that you will need to order.
- 2. Determine whether you will need a two or three U-Joint system. This is dictated by the angle-we recommend a 15° angle for the optimal setup, however up to 30° is acceptable. If using a three U-Joint system, a Support Bearing is necessary. The center U-Joint should either be 3/4" DD X 3/4" DD or 3/4"-36 X 3/4"-36 depending on whether you are using splined or DD shafts.
- 3. Use the Reference Application Chart to select the proper Rack and Pinion or Steering Box spline size for your system. If the chart does not list your application, just measure the diameter of the shaft and count the number of individual splines. If there is a flat, count half of the splines and then double that number.
- 4. Measure your column's output shaft. If it is a DD shaft (two rounds, two flats), then measure the rounds—it will either be a 1" DD or 3/4" DD. If there are splines, then measure the diameter and count the individual splines—it will either be 1"-48 or 3/4"-36.
- 5. If you are using splined shafts and a two U-Joint system, then measure the distance between the steering gear shaft and the column and then subtract 3-1/4". Round this number up to the next whole number to determine the shaft length you require.
- 6. If you are using a three U-Joint system, we recommend using dowel rods to mock up the system. Simply measure the length of the dowel rod and this will be the length of the shaft you will require. DD shafting can easily be cut down to size.

Important Notes:

- Phasing Keep the forks of the yokes closest to each other in line, and parallel to the center of the shaft to avoid binding.
- NEVER weld a Universal Joint! Welding reduces the strength of the metal and can melt the needle bearing seal.
- Set screws are supplied on all splined and DD Universal Joints. However, it is necessary to indent, by drilling, the shaft to properly secure the set screw mecha-



nism. A red thread locker should also be used. Periodically inspect the set screws to ensure tightness.

 The shaft should be installed 7/8" into the yoke (flush). A shaft that does not engage fully could sacrifice the strength of the system. However, if a shaft is too long, it can cause the shaft to interfere (bind) with the operation of the system.



| Steering Column Shaft Sizes | | | |
|---|--------------------------------------|------------------------------|----------------------|
| Application | Size | Dia. | Spline |
| GM Column Small Spline Large Spline Small DD Large DD | 3/4"-36 1"-48 3/4"-DD 1"-DD | .750 1.00 .750 1.00 | 36 48 DD DD |
| Ford Column Small Spline Small DD Large DD | 3/4"-36 3/4"-DD 1"-DD | .750 .750 1.00 | 36 DD DD |

The Billet-Joint® - Satin Polished (Polished U-Joints are Non-Returnable) Universal Joints are CNC-machined from aircraft steel to precision tolerances. The sealed needle bearing design will last ten times longer than a standard pin and block universal joint. The unique nickel plating prevents rust without the hassle of painting. Polishing available for a stainless look at a nominal charge.



Quality Steering Systems

Billet-Joint® Quick Order Installation Kits
Save by Ordering U-Joints as a Kit! Each kit includes (2) two
nickel-plated needle bearing Billet-Joints® and (1) one extra-long
22" DD shaft. Stainless U-Joint kits also available.

| Part No. | Column/Rack | Application |
|----------|------------------|--|
| FRUJKT1 | 1"DD / 9/16"-26 | FR Manual Racks |
| FRUJKT2 | 1"DD / 5/8"-36 | Vega / Corvair Box |
| FRUJKT3 | 1"DD / 3/4"-36 | Mustang Power |
| FRUJKT4 | 1"DD / FR Power | FR Power Racks |
| FRUJKT5 | 1"DD / 3/4"-30 | GM Power Box - 78 to Present |
| FRUJKT6 | 1"DD / 13/16"-36 | GM Power Box - 77 and Prior |
| FRUJKT7 | 3/4"DD / 3/4"DD | Center U-Joint with Support Bearing |



PHET-LONT®

BLLET-JOINT®

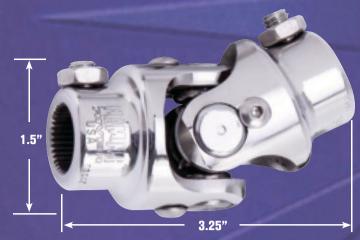
| Port No. | Description |
|------------------------|---|
| Part No. | Description |
| FR1700 | 3/4" X 3/4" |
| FR1700PL FR1701 | 3/4" X 3/4" Polished |
| 55555 | 3/4" X 9/16"-26 |
| FR1701PL | 3/4" X 9/16"-26 Polished |
| FR1702 | 3/4" X 3/4"-36 |
| FR1702PL | 3/4" X 3/4"-36 Polished |
| FR1703 | 3/4" X 3/4"-30 |
| FR1703PL | 3/4" X 3/4"-30 Polished |
| FR1704 | 3/4" X 5/8"-36 |
| FR1704PL | 3/4" X 5/8"-36 Polished |
| FR1705 | 3/4" X 1"-48 |
| FR1705PL | 3/4" X 1"-48 Polished |
| FR1706DD | 3/4" X 3/4"DD |
| FR1706DDPL FR1707DD | 3/4" X 3/4"DD Polished 3/4" X 1"DD |
| FR1707DDPL | 3/4" X 1"DD Polished |
| FR170700PL | 9/16"-26 X 3/4"-36 |
| FR1708PL | 9/16"-26 X 3/4"-36 9/16"-26 X 3/4"-36 Polished |
| FR1709DD | 9/16"-26 X 3/4"-36 Polished 9/16"-26 X 3/4"DD |
| FR1709DDPL | 9/16"-26 X 3/4"DD Polished |
| FR1710DD | 1"-48 X 1"DD |
| FR1710DDPL | 1"-48 X 1"DD Polished |
| FR1711 | 3/4"-36 X 3/4"-36 |
| FR1711PL | 3/4"-36 X 3/4"-36 Polished |
| FR1712DD | 1"-48 X 3/4"DD |
| FR1712DDPL | 1"-48 X 3/4"DD Polished |
| FR1713 | 1"-48 X 3/4"-36 |
| FR1713PL | 1"-48 X 3/4"-36 Polished |
| FR1714DD | 1"DD X 3/4"-36 |
| FR1714DDPL | 1"DD X 3/4"-36 Polished |
| FR1715DD | 3/4"-36 X 3/4"DD |
| FR1715DDPL | 3/4"-36 X 3/4"DD Polished |
| FR1716DD | 3/4"DD X 3/4"DD |
| FR1716DDPL | 3/4"DD X 3/4"DD Polished |
| FR1717DD | 1"DD X 3/4"DD |
| FR1717DDPL | 1"DD X 3/4"DD Polished |
| FR1718 | 13/16"-36 X 3/4" |
| FR1718PL | 13/16"-36 X 3/4" Polished |
| FR1719DD | 13/16"-36 X 3/4"DD |
| FR1719DDPL | 13/16"-36 X 3/4"DD Polished |
| FR1720 | 3/4"-48 X 3/4" |
| FR1720PL | 3/4"-48 X 3/4" Polished |
| FR1722DD | 5/8"-36 X 3/4"DD |
| FR1722PL | 5/8"-36 X 3/4"DD Polished |
| FR1723 | 13/16"-36 X 3/4"-36 |
| FR1723PL | 13/16"-36 X 3/4"-36 Polished |
| | |

| Part No. | Description |
|------------|--------------------------------|
| FR1724 | 3/4"-30 X 3/4"-36 |
| FR1724PL | 3/4"-30 X 3/4"-36 Polished |
| FR1725DD | 3/4" X 17mm DD |
| FR1725DDPL | 3/4" X 17mm DD Polished |
| FR1726 | 5/8"-36 X 3/4"-36 |
| FR1726PL | 5/8"-36 X 3/4"-36 Polished |
| FR1727DD | 3/4"-48 X 1"DD |
| FR1727DDPL | 3/4"-48 X 1"DD Polished |
| FR1728DD | 3/4"-48 X 3/4"DD |
| FR1728DDPL | 3/4"-48 X 3/4"DD Polished |
| FR1729 | 3/4"-48 X 3/4"-36 |
| FR1729PL | 3/4"-48 X 3/4"-36 Polished |
| FR1730 | 3/4"-48 X 17mm DD |
| FR1730PL | 3/4"-48 X 17mm DD Polished |
| FR1731 | 3/4"-48 X 3/4"-48 |
| FR1731PL | 3/4"-48 X 3/4"-48 Polished |
| FR1733DD | 3/4"-30 X 3/4"DD |
| FR1733DDPL | 3/4"-30 X 3/4"DD Polished |
| FR1734 | 1"-48 X 3/4"-30 |
| FR1734PL | 1"-48 X 3/4"-30 Polished |
| FR1735DD | 5/8"-36 X 1"DD |
| FR1735DDPL | 5/8"-36 X 1"DD Polished |
| FR1736 | 3/4"-36 X 17mm DD |
| FR1736PL | 3/4"-36 X 17mm DD Polished |
| FR1737 | 9/16"-26 X 3/4"-48 |
| FR1737PL | 9/16"-26 X 3/4"-48 Polished |
| FR1738 | 1" x 1" |
| FR1738PL | 1" x 1" Polished |
| FR1739 | 5/8 inch X 7/8 inch |
| FR1740 | 1" x 3/4" |
| FR1740PL | 1" x 3/4" Polished |
| FR1742 | 1" x 3/4"-36 |
| FR1743DD | 1"DD X 9/16"-26 |
| FR1743DDPL | 1"DD X 9/16"-26 Polished |
| FR1744 | 13/16"-36 X 1"-48 |
| FR1744PL | 13/16"-36 X 1"-48 Polished |
| FR1745 | 1"-48 X 5/8"-36 |
| FR1745PL | 1"-48 X 5/8"-36 Polished |
| FR1746DD | 1" DD X 3/4"-30 |
| FR1746DDPL | 1" DD X 3/4"-30 Polished |
| FR1749 | 5/8"-36 X 5/8 inch-36 |
| FR1749DD | 3/4"DD X 1" |
| FR1749DDPL | 3/4"DD X 1" Polished |
| FR1749PL | 5/8"-36 X 5/8 inch-36 Polished |
| FR1750 | 7/8" x 3/4 DD |
| FR1750C | 9/16"-26 X 5/8"-36(Chry) |

| | ELLET-JCINT® |
|------------|--|
| Part No. | Description |
| FR1750CPL | 9/16"-26 X 5/8"-36(Chry) Polished |
| FR1750PL | 3/4"DD X 7/8 Dia Polished |
| FR1754 | 1"DD X 1"DD |
| FR1754PL | 1"DD X 1"DD Polished |
| FR1755 | 5/8"-36(Chry) X 3/4"DD |
| FR1755PL | 5/8"-36(Chry) X 3/4"DD Polished |
| FR1756 | 5/8"-36(Chry) X 3/4"-36 |
| FR1756PL | 5/8"-36(Chry) X 3/4"-36 Polished |
| FR1757 | 5/8"-36(Chry) X 3/4" |
| FR1757PL | 5/8"-36(Chry) X 3/4" Polished |
| FR1758 | 13/16"-36 X 1"DD |
| FR1758PL | 13/16"-36 X 1"DD Polished |
| FR1759DD | 17mm DD X 3/4"DD |
| FR1759DDPL | 17mm DD X 3/4"DD Polished |
| FR1760 | 13/16 inch-36 X 13/16 inch-36 |
| FR1760PL | 13/16 inch-36 X 13/16 inch-36 Polished |
| FR1761 | 9/16"-36 X 9/16"-36 |
| FR1761PL | 9/16"-36 X 9/16"-36 Polished |
| FR1762DD | 9/16"-36 X 3/4"DD |
| FR1762DDPL | 9/16"-36 X 3/4"DD Polished |
| FR1763 | 5/8"-36 X 1" |
| FR1780 | 11/16"-36 X 3/4" |
| FR1780PL | 11/16"-36 X 3/4" Polished |
| FR1781 | 11/16"-36 X 1" DD |

| Part No. | Description |
|-------------|--------------------------------------|
| FR1781PL | 11/16"-36 X 1" DD Polished |
| FR1782 | 11/16"-36 X 3/4"-36 |
| FR1782PL | 11/16"-36 X 3/4"-36 Polished |
| FR1783DD | 11/16"-36 X 3/4" DD |
| FR1783DDPL | 11/16"-36 X 3/4" DD Polished |
| FR1784DD | Triangle Yoke X 1" DD |
| FR1784DDPL | Triangle Yoke X 1" DD Polished |
| FR1785DD | 11/16"-36 X 1"-48 |
| FR1785DDPL | 11/16"-36 X 1"-48 Polished |
| FR1786DD | Triangle Yoke X 3/4" |
| FR1786PL | Triangle Yoke X 3/4" Polished |
| FR1788 | Triangle Yoke X 3/4"-36 |
| FR1788PL | Triangle Yoke X 3/4"-36 Polished |
| FR1789-9 | 13/16"-36 x 1" |
| FR1789-9PL | 13/16"-36 x 1" Polished |
| FR1789DD | Triangle Yoke X 3/4" DD |
| FR1789DDPL | Triangle Yoke X 3/4" DD Polished |
| FR1789P | FR Power Rack U-joint: pyr x 3/4-DD® |
| FR1789P-2 | FR Power Rack U-joint: pyr x 3/4-36 |
| FR1789P-2PL | FR Power X 3/4-36 Polished |
| FR1789P-3 | FR Power X 1" DD |
| FR1789P-3PL | FR Power X 1" DD Polished |
| FR1789P-4 | FR Power X 3/4" |
| FR1789PPL | FR Power X 3/4" DD Polished |





Stainless Steel

Stainless Steel Universal Joints Flaming River now introduces a new Stainless Steel Universal Joint series. We have carefully selected 303 Stainless Steel for its strength, superior corrosion resistance and shine. Our stainless steel universal joints have such a precision machined finish that they look great right out of the box.

Stainless Steel Quick Order **Installation Kits**

Save by Ordering U-Joints as a Kit! Each kit includes (2) two Stainless Steel needle bearing universal joints and (1) one extra-long 22" DD stainless shaft. Satin or Polished finish



| Part No. | Column/Rack | Application |
|-----------|------------------|--|
| FRUJKT1SS | 1"DD / 9/16"-26 | FR Manual Racks |
| FRUJKT2SS | 1"DD / 5/8"-36 | Vega / Corvair Box |
| FRUJKT3SS | 1"DD / 3/4"-36 | Mustang Power |
| FRUJKT4SS | 1"DD / FR Power | FR Power Racks |
| FRUJKT5SS | 1"DD / 3/4"-30 | GM Power Box - 78 to Present |
| FRUJKT6SS | 1"DD / 13/16"-36 | GM Power Box - 77 and Prior |
| FRUJKT7SS | 3/4"DD / 3/4"DD | Center U-Joint with Support Bearing |





Stainless Steel

| Part No. | Description | |
|------------|------------------------------|--|
| FR2502 | 3/4" X 3/4"-36 | |
| FR2508 | 9/16"-26 X 3/4"-36 | |
| FR2508PL | 9/16"-26 X 3/4"-36 Polished | |
| FR2509DD | 9/16"-26 X 3/4" DD | |
| FR2509DDPL | 9/16"-26 X 3/4" DD Polished | |
| FR2511 | 3/4"-36 X 3/4"-36 | |
| FR2511PL | 3/4-36 X 3/4-36 Polished | |
| FR2512DD | 1"-48 X 3/4" DD | |
| FR2512DDPL | 1"-48 X 3/4" DD Polished | |
| FR2513 | 1"-48 X 3/4"-36 | |
| FR2513PL | 1"-48 X 3/4"-36 Polished | |
| FR2514DD | 1" DD X 3/4"-36 | |
| FR2514DDPL | 1" DD X 3/4"-36 Polished | |
| FR2515DD | 3/4"-36 X 3/4" DD | |
| FR2515DDPL | 3/4-36 X 3/4" DD Polished | |
| FR2516DD | 3/4" DD X 3/4" DD | |
| FR2516DDPL | 3/4" DD X 3/4" DD Polished | |
| FR2517DD | 1" DD X 3/4" DD | |
| FR2517DDPL | 1" DD X 3/4" DD Polished | |
| FR2519DD | 13/16"-36 X 3/4 DD | |
| FR2519DDPL | 13/16"-36 X 3/4 DD Polished | |
| FR2522DD | 5/8"-36 X 3/4" DD | |
| FR2522DDPL | 5/8"-36 X 3/4" DD Polished | |
| FR2523 | 13/16"-36 X 3/4"-36 | |
| FR2523PL | 13/16"-36 X 3/4"-36 Polished | |
| FR2524 | 3/4"-30 X 3/4"-36 | |
| FR2524PL | 3/4"-30 X 3/4"-36 Polished | |
| FR2526 | 5/8"-36 X 3/4"-36 | |
| FR2526PL | 5/8"-36 X 3/4"-36 Polished | |
| FR2528DD | 3/4"-48 X 3/4" DD | |
| FR2528DDPL | 3/4"-48 X 3/4" DD Polished | |
| FR2529 | 3/4"-48 X 3/4"-36 | |
| FR2529PL | 3/4"-48 X 3/4"-36 Polished | |
| FR2530DD | 17mm DD X 3/4"-48 | |
| FR2530DDPL | 17mm DD X 3/4"-48 Polished | |
| FR2533DD | 3/4"-30 X 3/4" DD | |
| FR2533DDPL | 3/4"-30 X 3/4" DD Polished | |
| | 1"-48 X 3/4"-30 | |
| FR2534 | | |
| FR2536DD | 17mm DD X 3/4"-36 | |
| FR2536DDPL | 17mm DD X 3/4"-36 Polished | |
| FR2546DD | 1" DD X 3/4"-30 | |
| FR2546DDPL | 1" DD X 3/4"-30 Polished | |
| FR2555C | 5/8"-36C X 3/4" DD | |
| FR2555CPL | 5/8"-36C X 3/4" DD Polished | |
| FR2556C | 5/8"-36C X 3/4"-36 | |

| Part No. | Description |
|-------------|--------------------------------------|
| FR2556CPL | 5/8"-36C X 3/4"-36 Polished |
| FR2559DD | 17mm DD X 3/4"DD |
| FR2559DDPL | 17mm DD X 3/4" DD Polished |
| FR2561 | 9/16"-36 X 9/16"-36 |
| FR2561PL | 9/16"-36 X 9/16"-36 Polished |
| FR2562DD | 9/16"-36 X 3/4" DD |
| FR2562DDPL | 9/16"-36 X 3/4" DD Polished |
| FR2563 | 17mm-54 X 3/4" DD |
| FR2564 | 17mm-54 X 1" DD |
| FR2567 | M16.5-36 X M16.5-36 |
| FR2570 | 9/16"-36 X 3/4"-36 |
| FR2570PL | 9/16"-36 X 3/4"-36 Polished |
| FR2582 | 11/16"-36 X 3/4"-36 |
| FR2582PL | 11/16"-36 X 3/4"-36 Polished |
| FR2583 | 11/16"-36 X 3/4" DD |
| FR2583PL | 11/16"-36 X 3/4" DD Polished |
| FR2586 | 3/4" DD X 16.5 X 36 |
| FR2587 | 3/4" X 16.5 X 36 |
| FR2589-2 | Stainless Steel U-Joint: 3/4" X 3/4" |
| FR2589-4 | 3/4" X 9/16"-26 |
| FR2589-6 | 3/4" X 3/4" DD |
| FR2589-22 | 17mm-54 X 17mm-54 |
| FR2589P | FR Power X 3/4" DD |
| FR2589P-2 | FR Power X 3/4"-36 |
| FR2589P-2PL | FR Power X 3/4"-36 Polished |
| FR2589P-3 | FR Power X 1" DD |
| FR2589PPL | FR Power X 3/4" DD Polished |
| FR2598-13 | 17mm-54 X 3/4" DD Double |
| FR2598-26 | 17mm-54 X 17mm-54 DD Double |



Pinch Bolt Universal Joints

Stainless Pinch Bolt Universal Joints
Stainless Pinch Bolt Universal Joints are CNC-machined from high-quality 304 stainless steel for added strength and durability. The high-strength shoulder bolt securely clamps the yoke to the shaft for a smooth, low-profile appearance.



| Part No. | Description |
|------------|------------------------------------|
| FR2703 | 3/4"-30 x 3/4" Satin Finish |
| FR2703PL | 3/4"-30 x 3/4" Polished Finish |
| FR2704 | 5/8"-36 x 3/4" Satin Finish |
| FR2704PL | 5/8"-36 x 3/4" Polished Finish |
| FR2708 | 9/16"-26 X 3/4"-36 Satin Finish |
| FR2708PL | 9/16"-26 X 3/4"-36 Polished Finish |
| FR2709DD | 9/16"-26 x 3/4" DD Satin Finish |
| FR2709DDPL | 9/16"-26 x 3/4" DD Polished Finish |
| FR2711 | 3/4"-36 x 3/4"-36 Satin Finish |
| FR2711PL | 3/4"-36 x 3/4"-36 Polished Finish |
| FR2712 | 17MMDD x 1" DD Satin Finish |
| FR2713 | 17MMDD x 13/16"-36 Satin Finish |
| FR2715DD | 3/4"-36 x 3/4" DD Satin Finish |
| FR2715DDPL | 3/4"-36 x 3/4" DD Polished Finish |
| FR2716DD | 3/4" DD x 3/4" DD Satin Finish |

| Part No. | Description |
|------------|-----------------------------------|
| FR2716DDPL | 3/4" DD x 3/4" DD Polished Finish |
| FR2717DD | 3/4" DD x 1" DD Satin Finish |
| FR2717DDPL | 3/4" DD x 1" DD Polished Finish |
| FR2718 | 13/16"-36 x 3/4" Satin Finish |
| FR2719DD | 13/16"-36 x 3/4" DD Satin Finish |
| FR2722DD | 5/8"-36 x 3/4" DD Satin Finish |
| FR2722DDPL | 5/8"-36 x 3/4" DD Polished Finish |
| FR2723 | 3/4"-36 x 13/16"-36 Satin Finish |
| FR2725DD | 17MMDD x 3/4" Satin Finish |
| FR2725DDPL | 17MMDD x 3/4" Polished Finish |
| FR2726 | 3/4"-36 5/8"-36 Satin Finish |
| FR2726PL | 3/4"-36 5/8"-36 Polished Finish |
| FR2733DD | 3/4"-30 x 3/4" DD Satin Finish |
| FR2733DDPL | 3/4"-30 x 3/4" DD Polished Finish |
| | |



Forged Universal Joints
These Forged Universal Joints have
a needle bearing design and are
ideal for performance applications.
These U-Joints can be welded and
pinned as required by sanctioning
bodies. Available in most popular
sizes, including 3/4" smooth. Rated at
350+ ft.. Lbs.. Black oxidized finish for
corrosion resistance.

| Part No. | Description |
|----------|------------------|
| FR2630 | 3/4" X 3/4" |
| FR2631 | 3/4" X 9/16"-26 |
| FR2632 | 3/4 X 5/8"-36 |
| FR2633 | 3/4" X 5/8"-36C |
| FR2634 | 3/4" X 3/4"-30 |
| FR2635 | 3/4" X 3/4"-36 |
| FR2636 | 3/4" X 13/16"-36 |

| Part No. | Description |
|----------|--------------------|
| FR2637 | 3/4" X 3/4"-48 |
| FR2638 | 3/4" X 17mm DD |
| FR2640 | 3/4" X 3/4"-20 |
| FR2642 | 5/8"-36 X 5/8"-36 |
| FR2643 | 3/4"-36 X 3/4" DD |
| FR2644 | 3/4" DD X 3/4" DD |
| FR2645 | 3/4" DD X 9/16"-26 |

| | Part No. | Description |
|---|----------|---------------------|
| | FR2646 | 3/4"-48 X 3/4"-20 |
| 5 | FR2647 | 3/4"-30 X 3/4"-20 |
| | FR2648 | 3/4" DD X 3/4" |
| | FR2651 | 3/4"-36 X 3/4"-36 |
| | FR2655 | 3/4" DD X 13/16"-36 |
| | FR2661 | 3/4"-20 X 5/8"-36 |

Double U-Joints / Vibration Resistors



Billet Double Universal Joints

A complete line of Double Universal Joints are available. This design can accommodate up to a 60° angle for added flexibility when designing your steering system. The Double Universal Joints are also CNC-machined and Electroless nickel plated. Satin or Polished finish. Overall Length is 5-1/8"

| Part No. | Box/Column | Shaft |
|----------|------------|---------|
| FR1790 | 3/4"-36 | 3/4"-DD |
| FR1791 | 9/16"-26 | 3/4"-DD |
| FR1792 | 3/4"-36 | 3/4"-36 |
| FR1793 | 9/16"-26 | 3/4"-36 |
| FR1794 | 3/4"-DD | 3/4"-DD |
| FR1795 | 3/4"-30 | 3/4"-36 |
| FR1796 | 3/4"-DD | 1"-48 |
| FR1797 | 3/4" | 3/4" |
| FR1798 | 3/4"-36 | 5/8"-36 |
| FR1798-1 | 3/4"-36 | 3/4"-48 |
| FR1798-2 | 3/4" | 3/4"-DD |
| FR1798-3 | 5/8"-36 | 3/4"-DD |
| FR1798-4 | 7/8" | 3/4" |



| Part No. | Description |
|----------|-----------------------------|
| FR2592 | 3/4"-36 X 3/4"-36 |
| FR2592PL | 3/4"-36 X 3/4"-36 Polished |
| FR2593 | 9/16"-26 X 3/4"-36 |
| FR2593PL | 9/16"-26 X 3/4"-36 Polished |
| FR2594 | 3/4" DD X 3/4" DD |



Vibration Resistor Universal Joints

Our Vibration Resistor Universal Joints utilize a bushing system of thermoplastic rubber to absorb vibration or "road feel" from the steering system. This unique, load-absorbing material is resistant to oil, salt, and weather conditions. Overall length is 4-3/4". Bushing side of U-Joint is available in 3/4" DD or 3/4"-36. Custom sizes available.

Satin or Polished finish

| Part No. | Resistor/Bushing Side | Yoke/Shaft Side |
|----------|-----------------------|-----------------|
| FR1880 | 3/4"-36 | 9/16"-26 |
| FR1881 | 3/4"-36 | 5/8"-36 |
| FR1882 | 3/4"-36 | 3/4"-30 |
| FR1883 | 3/4"-36 | 3/4"-36 |
| FR1884 | 3/4"-36 | 3/4"-48 |
| FR1885 | 3/4"-36 | 13/16"-36 |
| FR1886 | 3/4"-36 | 1"-48 |
| FR1887 | 3/4"-DD | 3/4"-36 |
| FR1888 | 3/4"-36 | 1"-DD |
| FR1889 | 3/4"-DD | 9/16"-26 |
| FR1897 | 3/4"-DD | 5/8"-36 |
| FR1898 | 3/4"-DD | 3/4"-30 |
| FR1899 | 3/4"-DD | 3/4"-48 |
| FR1893 | 3/4"-DD | 13/16"-36 |
| FR1894 | 3/4"-DD | 1"-48 |
| FR1895 | 3/4"-DD | 3/4"-DD |
| FR1896 | 3/4"-DD | 1"-DD |

Stainless Steel Double Universal Joints

| Part No. | Description |
|-------------|----------------------------|
| FR2594PL | 3/4" DD X 3/4" DD Polished |
| FR2598-2 | 1" DD X 1"-48 |
| FR2598-22 | 17MMDD X 3/4" DD |
| FR2598-22PL | 17MMDD X 3/4" DD Polished |
| FR2598-2PL | 1" DD X 1"-48 Polished |



Chrome Moly

Chrome Moly Universal Joints

Flaming River has designed and manufactured a new lowprofile Chrome Moly U-Joint. These needle bearing universal ioints do not

require lubrication, can accommodate up to a 35° angle and will outlast pin and block universal joints in racing applications. With a strength rating of 400+ ft. Lbs..., these can be used for street use. Black oxidized finish for corrosion

| Part No. | Description |
|----------|--------------------|
| FR1909 | 3/4" x 3/4"-20 |
| FR1910 | 3/4" x 3/4"-30 |
| FR1911 | 3/4" x 3/4"-36 |
| FR1912 | 3/4" x 13/16"-36 |
| FR1913 | 3/4" x 5/8"-36C* |
| FR1914 | 3/4" x 5/8"-36 |
| FR1916 | 3/4" x 3/4" |
| FR1917 | 3/4" x 9/16"-26 |
| FR1918 | 3/4" x 17MMDD |
| FR1919 | 5/8"-36 x 5/8-36 |
| FR1920 | 3/4"-DD x 3/4"-DD |
| FR1921 | 5/8"-36 x 3/4"-36 |
| FR1922 | 3/4"-36 x 3/4"-36 |
| FR1923 | 9/16"-26 x 3/4"-36 |
| FR1924 | 9/16"-26 x 3/4"-DD |

| Part No. | Description |
|-----------|--------------------|
| FR1925 | 3/4"-36 x 3/4"-DD |
| FR1926 | 3/4" x 3/4"-DD |
| FR1927 | 5/8"-36 x 3/4"-DD |
| FR1928 | 3/4"-DD x 3/4"-30 |
| FR1929 | 13/16" x 3/4"DD |
| FR1930 | 17MMDD x 3/4"-48 |
| FR1932 | 17MMDD x 3/4"-DD |
| FR1934 | 1"DD x 3/4"-DD |
| FR1935 | 1"DD x 3/4" |
| FR1939-1 | 3/4"-36 x 1"DD |
| FR1939-10 | 5/8"-36C x 3/4"-DD |
| FR1939-11 | 1"DD x 9/16"-26 |
| FR1939-15 | 5/8"-36 x 1"DD |
| FR1939-21 | 3/4"-30 x 3/4'-36 |
| FR1939-22 | 3/4"DD x 3/4"-20 |

| Part No. | Description |
|---------------------|---------------------|
| FR1939-26 | 17MM-54 x 13/16"-36 |
| FR1939-41 | 17MM-54 x 3/4" |
| FR1939-4 | 3/4"-36 x 17MMDD |
| FR1939-8 | 3/4"-30 x 1"DD |
| FR1939-9 | 1"DD x 1"DD |
| FR1963 | 17MM-54 x 3/4"DD |
| FR1964 | 17MM-54 x 1"DD |
| FR1967 | 17MM-54 x 17MM-54 |
| FR1968 | 17MM-54 x 3/4"-36 |
| FR1969 | FR Power x 3/4"DD |
| FR1971 | 17MM-54 x 3/4" |
| FR1977 | FR Power x 3/4" |
| FR1984 | 17MM-54 x 3/4"-20 |
| *Chrysler Power Box | |



Flaming River has designed and manufactured a new Chrome Moly Needle-Bearing Double Universal Joint that allows for up to 80° angles. This Universal Joint is for applications where clearance and weight are primary concerns. These Needle Bearing U-Joints will outlast Pin and Block style U-Joints in racing applications and do not require lubrication. Standard strength rating is 300 foot Lbs.

| Part No. | Description |
|----------|-------------------|
| FR2800 | 3/4" x 3/4" |
| FR2801 | 3/4" x 9/16"-26 |
| FR2802 | 3/4" x 3/4"-36 |
| FR2803 | 9/16"-26 x 3/4"DD |
| FR2804 | 3/4"-36 x 3/4"DD |
| FR2805 | 3/4"DD x 3/4"DD |
| FR2806 | 3/4"DD x 1"DD |
| FR2807 | FR Power x 3/4"DD |
| FR2808 | 17MM-54 x 3/4"DD |

| Part No. | Description |
|----------|-------------------|
| FR2809 | 17MM-54 x 1"DD |
| FR2810 | 13/16"-36 x 1"DD |
| FR2811 | 5/8"-36C x 1"DD |
| FR2812 | 3/4"-48 x 3/4" |
| FR2813 | 3/4" x 3/4"DD |
| FR2814 | 3/4"DD x 17MMDD |
| FR2815 | 17MM-54 x 17MM-54 |
| FR2816 | 3/4"-30 x 3/4"-36 |



Couplers, Pin & Block U-Joints & Mil-Spec

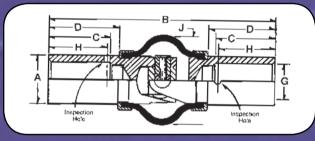


| Part No. | Description | Part No. | Description |
|----------|-------------------|----------|-------------------|
| FR1940 | 3/4" x 9/16"-26 | FR1944 | 3/4" x 3/4"-30 |
| FR1941 | 3/4" x 3/4"-36 | FR1945 | 3/4"-DD x 3/4"-DD |
| FR1942 | 3/4"-36 x 3/4"-36 | FR1946 | 3/4" x 3/4"-DD |
| FR1943 | 3/4" x 5/8"-36 | FR1948 | 3/4" x 11/16"-36 |

Steel Pin and Block Universal Joints
The preferred choice of drag racers for their sleek and lightweight design. These are available in both 1-1/4" and 1" diameter designs.

Note: For racing applications only – NOT recommended for street use. Frequent lubrication required.

| Part No. | Description | 0.D. |
|----------|--------------------|--------|
| FR1900 | 3/4" x 3/4" | 1-1/4" |
| FR1901 | 3/4" x 9/16"-26 | 1-1/4" |
| FR1902 | 3/4" x 3/4"-36 | 1-1/4" |
| FR1903 | 3/4" x 3/4"-30 | 1-1/4" |
| FR1904 | 3/4" x 5/8"-36 | 1-1/4" |
| FR1905 | 9/16"-26 x 3/4"-36 | 1-1/4" |
| FR1906 | 3/4" x 13/16"-36 | 1-1/4" |
| FR1907 | 5/8"-36 x 7/8" | 1-1/4" |
| FR1820 | 3/4" x 3/4" | 1" |
| FR1821 | 3/4" x 9/16"-26 | 1" |
| FR1822 | 3/4" x 5/8"-36 | 1" |



outside diameter of 1" (except FR1942, which is 1-1/4").

| Part No. | Nomi- nal Size O.D. | 0.D. "A" +.000 002 | I.D. "G" + .004- .001 | Max Dia. "j" +1/64 | Length "B" +/- 1/ | Max "C" | Min "D" |
|-----------|------------------------------|-----------------------------|--|---------------------------------------|---------------------------------------|---|------------|
| FR1800B8 | 1/2" | .495 | .375 | 29/32 | 2-5/16" | 5/8" | 11/16" |
| FR1800B10 | 5/8" | .620 | .500 | 1-3/32" | 2-3/4" | 3/4" | 13/16" |
| FR1800B12 | 3/4" | .745 | .625 | 1-1/32" | 3-3/16" | 7/8" | 15/16" |
| FR1800B14 | 7/8" | .870 | .750 | 1-1/2" | 3-5/8" | 1" | 1-1/16" |
| / | "H" +/- 1/64 | Wt. (Lbs.) | Min. Ult. Static Torque (In Lbs.) | Axial Tension & Comp. (Lbs.) | Tension- al Play Max Degrees | Endurance torque Test (In. Lbs) | / |
| FR1800B8 | 9/16" | .079 | 675 | 1,000 | 0.62 | 90 | |
| FR1800B10 | 11/16 | .133 | 1,200 | 1,500 | 0.50 | 162 | |
| FR1800B12 | 13/16 | .212 | 2,100 | 2,000 | 0.42 | 285 | NO THE |
| FR1800B14 | 15/16 | .314 | 3,500 | 3,500 | 0.36 | 450 | = 34 |



Mil-Specification Universal Joints

These Universal Joints are similar to military specification joints for aircraft and have become the select choice of drag racers due to their lightweight design. A lubricant-filled silicone boot provides maintenance-free operation for extended universal joint life. This boot is designed to operate under high temperature conditions, with a continuous rating of 650°F. Please note nominal size is the outside diameter. Not intended for street use.

Not For Street Use

IMPORTANT: This is a lightweight application that is not designed for circle track, street, or highway use and not recommended for steering. Please see inch lbs. Torque rating listed in the chart above to determine if this is suitable for your application. Ideal for shifter linkage.

Shafts & Support Bearings

Stainless Steel Shafts

Flaming River now offers a line of stainless steel shafts manufactured from high quality 303 stainless. This is one of the best alloys of stainless steel for strength, corrosion resistance and shine. Our stainless shafts are available with 3/4"-36 spline or 3/4" DD (3/4" Round with two flats) and come in different lengths which can be cut down to size. Available with or without polishing.



| Part No. | Description |
|-------------|------------------------|
| FR1870-4 | 4" Stainless Steel |
| FR1870-4SS | 4" Polished Stainless |
| FR1870-6 | 6" Stainless Steel |
| FR1870-6SS | 6" Polished Stainless |
| FR1870-8 | 8" Stainless Steel |
| FR1870-8SS | 8" Polished Stainless |
| FR1870-10 | 10" Stainless Steel |
| FR1870-10SS | 10" Polished Stainless |
| FR1870-12 | 12" Stainless Steel |
| FR1870-12SS | 12" Polished Stainless |
| FR1871-18 | 18" Stainless Steel |
| FR1871-18SS | 18" Polished Stainless |
| FR1871-20 | 20" Stainless Steel |
| FR1871-20SS | 20" Polished Stainless |
| FR1871-22 | 22" Stainless Steel |
| FR1871-22SS | 22" Polished Stainless |
| FR1871-30 | 30" Stainless Steel |
| FR1871-30SS | 30" Polished Stainless |
| FR1871-32 | 32" Stainless Steel |
| FR1871-32SS | 32" Polished Stainless |
| FR1871-36 | 36" Stainless Steel |
| FR1871-36SS | 36" Polished Stainless |



| Part No. | Description |
|---------------|---------------------------|
| FR1851-10 | 10" DD Carbon Steel |
| FR1851-10SS | 10" DD Stainless Steel |
| FR1850 | 18" DD Carbon Steel |
| FR1850SS | 18" DD Stainless Steel |
| FR1850SSPL | 18" DD Polished Stainless |
| FR1850-22 | 22" DD Carbon Steel |
| FR1850-22SS | 22" DD Stainless Steel |
| FR1850-22SSPL | 22" DD Polished Stainless |
| FR1851 | 36" DD Carbon Steel |
| FR1851SS | 36" DD Stainless Steel |
| FR1851SSPL | 36" DD Polished Stainless |

Frame Mount Support Bearing

FR1812BI

This show-quality billet support bearing mounts using two 1/4"-20 fasteners. 2-1/2" length to fit a 3/4" shaft diameter. Polished aluminum finish.



| | bearing. Slotted for adjustability. Available in all Angled | | |
|---|---|---|--|
| | Part No. | Description | |
| | FR1810KA | Angled Bracket & Support Bearing | |
| | FR1810KAC | Angled Bracket & Support Bearing Chrome Finish | |
| | FR1810KS | Straight Bracket & Support Bearing | |
| 4 | FR1810KSC | Straight Bracket & Support Bearing Chrome Finish | |

Support Bearing

When using a three-joint steering system, a Double U-Joint, or a Vibration Resistor, a Support Bearing is necessary to complete the installation. Available in Zinc, Stainless, and Polished Stainless finishes.

| Part No. | Description |
|----------|-------------------------------|
| FR1810 | Support Bearing - Zinc Plated |
| FR1811 | Support Bearing - Stainless |
| FR1811PL | Support Bearing - Polished |

Truck Slip Shaft

Dodge • Ford Jeep • Chevy

| Part No. | Year |
|----------------------|---------------------------------------|
| Dodge Truck | |
| FR1517-76P | 1976-78 Power |
| FR1517-76M | 1976-78 Manual |
| FR1517-79P/M | 1979-82 Power/Manual |
| FR1517-83S | 1983-90 Straight Column |
| FR1517-83T | 1983-90 Tilt Column |
| FR1517-79P/M | 1991-93 |
| FR1517-94V | 1994 w/ Vibration Upgrade |
| FR1517-96V | 1995-98 w/ Vibration Upgrade |
| FR1517-94 | 1994 |
| FR1517-96 | 1995-98 |
| Ford F150 / F250 / | F350 |
| FR1518-36 | 1974-79 |
| FR1518-1DD | 1984-94 |
| Jeep CJ-5 / CJ-6 / (| CJ-7 / CJ-8 |
| FR1519-76P | 1972-86 Power Steering |
| FR1519-76M | 1972-86 Manual Steering |
| FR1519-PTLT | 72-86 Power Steering w/ FR Column |
| FR1519-MTLT | 72-86 Manual Steering w/ FR Column |
| Jeep Wrangler | |

1987-95

FR1519-87P/M

Truck Steering Slip Shaft Kits – Ideal for Lift Kits These unique steering systems are designed to completely update the OEM steering system. The slip shaft kit includes a universal joint for the column, a slip-universal joint for the steering box or rack and pinion, a 36" DD shaft—which can be cut to size—and protective bellows. The system allows for up to two inches of slip and collapsibility.

- Vibration upgrade available
- Plating and polishing available
- All kits include two universal joints



1997-2000 Jeep TJ Steering Slip Shaft Kit
This new slip and collapsible steering shaft kit
is designed to eliminate any play in the factory
system and to accommodate lift applications. It
features three inches of slip and collapsibility. Includes two sealed needle bearing universal joints,
protective bellow and slip-shaft. Ideal for off-road
use or for daily drivers.

FR1519-97





Rack & Pinion Cradle Systems

CRADIE YOUR RIDE

The Most Complete Cradle Kits on the Market!

All-New Bolt-in Rack and Pinion Cradle Systems for Classic, Performance, and Muscle Cars. Flaming River's Rack and Pinion Steering Systems continue to expand by customer demand. Our Rack and Pinion Kits enable classic vehicles to have the benefits and safety of modern steering, without any chassis modification—no cutting, drilling, or welding required!

The jig welded cradle concept bolts right in to the original mounting location—eliminating worn steering parts and maintaining the original suspension. The cradle also correctly positions the steering rack, and adds independent support of the suspension parts.

Rack and Pinion steering is lighter and more responsive than the original recirculating ball steering box. All Flaming River Rack and Pinion Systems retain the full factory turning radius and are Made in the USA in Berea, OH.

Note: All Flaming River Rack and Pinion Cradle Systems have been designed and tested using a factory original platform vehicle. Any variation or modification from the vehicle's original chassis, suspension, drivetrain, or drive height may require additional modification for installation.



- Today's Steering Technology...
- All-new parts
- Made in the USA with Lifetime Serviceability
- Bolts into the original steering box location and provides full turning radius!
- Patented cradle technology

Lifetime Serviceability

Bolts in place of Steering Box

Flaming River Certified
The Flaming River Certified
imprinted logo indicates that each
of our products have been tested
to exacting standards.



If It Doesn't Say Flaming River...
It Just Isn't Good Enough!

55-56 Chevy Rack & Pinion Power or Manual Cradle System

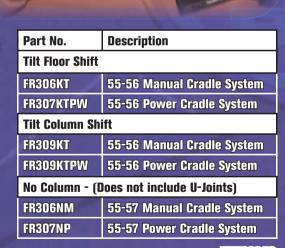


Flaming River has now engineered the popular rack and pinion cradle systems for the 55-57 Chevy with power or manual steering. This system replaces the early long shaft steering box with an optional new Tilt column. All mounting hardware, pump, bracket, reservoir and universal joints are also included for a complete kithoses are sold separately. By mounting the rack on

the cradle system, we not only reinforce the chassis, but also provide increased ground clearance. This true fixture welded mounting cradle fits between the frame rails and bolts in place using the original chassis location. No suspension modification is required and the system installs easily with hand tools. Full turning radius is engineered into the system.

Manual Rack and Pinion Kit Includes:

- Paintable or PolishedTilt Column
- Mounting Hardware
- Wiring Connector
- Universal Joints
- Patented Rack & Pinion Cradle System
- Swivel Floor Mount for easy column installation









57 Chevy Rack & Pinion Cradle System





Power Rack and Pinion Kit Includes:

- Paintable or Polished Tilt Column
- Mounting Hardware
- Wiring Connector
- Universal Joints
- Patented Rack & Pinion Cradle System
- Power Steering Pump with Bracket and Pulley
- Aluminum Reservoir (Hoses sold separately)
- Swivel Floor Mount for easy column installation

| Part No. | Description | |
|---------------------|----------------------------|--|
| Tilt Floor Shift | | |
| FR308KT | 57 Manual Cradle System | |
| FR308KTPW | 57 Power Cradle System | |
| Tilt Column Shift | Tilt Column Shift | |
| FR310KT | 57 Manual Cradle System | |
| FR311KTPW | 57 Power Cradle System | |
| No Column - (Does n | ot include U-Joints) | |
| FR306NM | 55-57 Manual Cradle System | |
| FR307NP | 55-57 Power Cradle System | |
| | | |

Power Steering Hose Kit FR1610 Sold Separately See Pg. 138





Flaming River has designed a
direct bolt-in steering system
that utilizes a power rack and
pinion engineered for your
Classic Camaro! Like the
manual kit, the power rack
and pinion provides a quick
steering ratio with full turning
radius! The power rack and
pinion installs easily (within
hours) using the existing
chassis hole locations. Available with or without steering
column.

 Designed for Big Block and Small Block Chevy applications with stock style oil pans

- All NEW Power Rack and Pinion with Lifetime Serviceability
- Billet-Joint® and Column Adapter included
- Stronger Rack Gear 1 inch diameter
- More than 6 inches of travel and Full Turning Radius
- Bolts into Existing Chassis with no Suspension Modification
- Fluid and Pressure Tested and Certified

| Part No. | Description |
|---------------|---|
| Big Block | |
| FR303PWB | 67-68 Power Cradle Kit with Paintable Tilt Column |
| FR304PWB | 69 Power Cradle Kit with Paintable Tilt Key Column |
| Small Block | |
| FR303PW | 67-68 Power Cradle Kit with Paintable Tilt Column |
| FR304PWK | 69 Power Cradle Kit with Paintable Tilt Key Column |
| No Column Kit | ts |
| FR304RCPW | 67-69 Power Cradle - This kit does not include P/S Pump, U-Joints or accessories. |
| FR304NCPW | 67-69 Power Cradle - This kit includes P/S Pump, U-Joints and accessories. |



Power Rack and Pinion Kit Includes:

- Paintable or Polished Tilt Column
- Mounting Hardware
- Wiring Connector
- Universal Joints
- Patented Rack & Pinion Cradle System
- Power Steering Pump with Bracket and Pulley
- Aluminum Reservoir
 (Hoses sold separately)
- Swivel Floor Mount for easy column installation



Power Steering Hose Kit FR1610 Sold Separately See Pg. 138



1967-69 Camaro Manual Rack & Pinion Cradle System

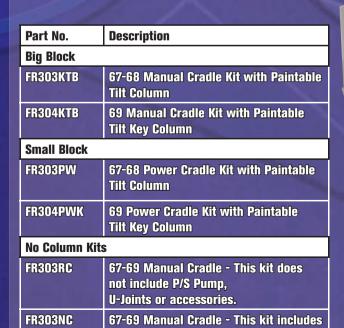




Flaming River Certified
The Flaming River Certified imprint
and the logo stamped on each
product indicate that all have
been tested to exacting standards.

Flaming River has designed a direct bolt-in steering
system that utilizes a manual rack and pinion engineered
for your Classic Camaro! The rack and pinion has a
travel and ratio with full turning radius that feels almost
like power steering! The best part of this system is that
it installs easily (within hours) using the existing chassis hole locations. Complete kit with everything needed
except the steering wheel. Patented cradle technology
and the most complete kit on the market.

- Maintains original suspension
- No Welding Bolts into existing chassis holes
 - Manual steering that feels like power
- Installation hardware and U-Joints/shaft kit included
- Tilt Column Kits include mounting clamp and female wiring adapter
- Designed for small block Chevy applications



P/S Pump, U-Joints and accessories.



- Tilt Column
- Mounting Hardware
- Wiring Connector
- Universal Joints
- Patented Rack and Pinion Cradle System
- Billet Swivel Floor Mount



1970-81 Camaro Power & Manual Rack & Pinion Cradle System



| Part No. | Description |
|-----------|--|
| FR316KTPW | 70-81 Power Cradle Kit with Paintable Tilt Key Column |
| FR316KTMN | 70-81 Manual Standard Ratio (20:1) Cradle Kit with Paintable Tilt Key Column |
| FR316KTQR | 70-81 Manual Quick Ratio (15:1) Cradle Kit with Paintable Tilt Key Column |

This new bolt-in rack and pinion cradle is available for both power and manual steering systems. This unique new style of steering system utilizes the original inner and outer tie rod ends. • This makes for simple installation and maintains the original pivot position.

No cutting, welding or drilling to the chassis-it bolts into the existing steering box holes. Easily converts this steering box application to rack and pinion steering without any modification.

- All NEW Power Rack and Pinion with Lifetime Serviceability
- Billet-Joint® and Column Adapter included
- Stronger Rack Gear 1 inch diameter
- More than 6 inches of travel and Full Turning Radius
- Bolts into Existing Chassis with no Suspension Modification
- Fluid and Pressure Tested and Certified



Power Steering Hose Kit FR1610 Sold Separately See Pg. 138

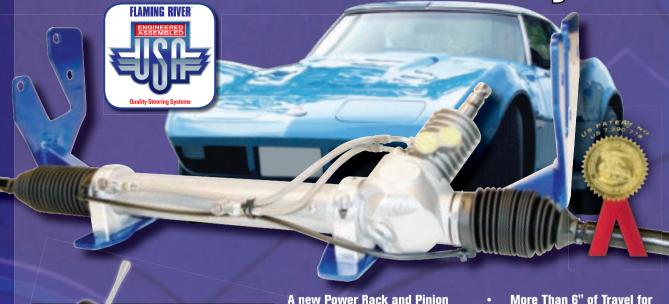


If It Doesn't Say Flaming River...
It Just Isn't Good Enough!

Power Rack and Pinion Kit Includes:

- Tilt Key Column
- Mounting Hardware
- Wiring Connector
- Universal Joints
- Rack and Pinion Cradle System
- Aluminum Mounting Reservoir (Hoses sold separately)
- Power Steering Pump and Pulley
- Billet Swivel Floor Mount

1963-82 Corvette Power & Manual Rack & Pinion Cradle System





For Steering Column information, see pages 22-23

A new Power Rack and Pinion **Cradle System is now available** for improved horsepower, performance and road handling. Kit includes hardware, universal joints, cradle and quick ratio rack and pinion.

- **All New Components**
- **Bolts into existing chassis** and original mounting locations with no suspension modification
- More Than 6" of Travel for **Full Turning Radius!**
- Stronger Rack Shaft
- **Longer Cylinder and Overlapping Tube Design**
- Lifetime Serviceability

Note: This kit works with the factory steering column and power steering pump--column and pump not included.

Power Rack and Pinion Kit Includes:

- **Universal Joints**
- **Patented Rack and Pinion Cradle System**
- **Universal Joints and Shafting**
- **Mounting Hardware**
- **Stainless Braided Hose Kit**
- **Support Bearing Kit**



Power Steering Pump Kit to convert your manual steering to power





The Flaming River Certified imprint and the logo stamped on each product indicate that all have been tested to exacting standards.

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| |

1964-67 Chevelle Power & Manual Rack & Pinion Cradle System



New & Improved Travel Bar Design

The Rack & Pinion Cradle System for the 1964-65 Chevelle uses a travel bar design to properly position the steering pivot points to the original location and deliver original turning radius. The travel bar system features a stabilizer clamp that provides added stability while driving. This kit uses the factory

tie rods to connect the travel bar to the vehicle's spindles. It installs in the original mounting holes for the steering box and idler arm assembly, and does not require any cutting, drilling, or welding, and installs easily using basic hand tools.



Power Steering Hose Kit FR1610 Sold Separately See Pg. 138

| Part No. | Description |
|----------|---|
| FR330KT | 64-65 Power Cradle Kit with Paintable Tilt Column |
| FR330KTM | 64-65 Manual Standard Ratio (20:1) Cradle Kit with Paintable Tilt Column |
| FR366KT | 66-67 Power Cradle Kit with Paintable Tilt Column |
| FR366KTM | 66-67 Manual Standard Ratio (20:1) Cradle Kit with Paintable Tilt Column |

Power Rack and Pinion Kit Includes:

- Tilt Key Column
- Mounting Hardware
- Wiring Connector
- Universal Joints
- Rack and Pinion Cradle System
- Aluminum Mounting Reservoir (Hoses sold separately)
- Power Steering Pump and Pulley
- Billet Swivel Floor Mount





Flaming River has introduced a Rack & Pinion Cradle
System for the 1968 to 1972
Chevrolet Chevelle and El
Camino, plus other sister GM
Intermediate cars of the same
period – Pontiac GTO/LeMans,
Oldsmobile 4-4-2/Cutlass and
Buick GS/Skylark, plus the GMC
Conquistador.

The system is designed for cars powered by small or big block Chevrolet engines, and uses a unique Travel Bar system that connects new tubular inner tie-rod ends to the original pivot points, reducing bump steer.

The Chevelle Rack and Pinion Cradles are precision jig-welded and install in the stock steering system mounting holes. No drilling, cutting or welding is required.

- All NEW Power Rack and Pinion with Lifetime Serviceability
- Billet-Joint® and Column Adapter included
- Stronger Rack Gear 1 inch diameter
 Mare then 5 inches of trough
- More than 6 inches of travel and Full Turning Radius
- Bolts into Existing Chassis with no Suspension Modification
- Fluid and Pressure Tested and Certified

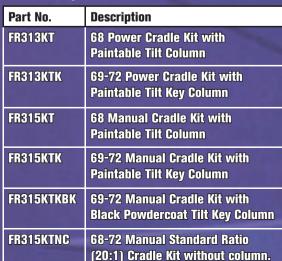
Aluminum Mounting Reservoir (Hoses sold separately)

Power Steering Pump and Pulley

Billet Swivel Floor Mount



- Tilt Key Column
- Mounting Hardware
- Wiring Connector
- Universal Joints
- Rack and Pinion Cradle System





Ultra-Angle Exhaust Headers

FR50001C



1958-60 Impala Power Rack & Pinion Cradle System



The new Flaming River 1958-60 **Impala Power Rack and Pinion Cradle** Kit has over 6" of travel, provides full lock-to-lock turning radius, and has an adjustable pinion angle. This kit uses a travel bar design to properly position the steering pivot points to the original location and deliver the

original turning radius. The travel bar system features a stabilizer quide clamp that provides added stability while driving. Our Rack and Pinion system uses the factory tie rods to connect the travel bar to the vehicle's spindles. This kit installs in the original mounting holes for the steer-

ing box and idler arm assembly, and does not require any cutting, drilling, or welding, and installs using basic hand tools. This is a completely new unit, and is Made in the USA. No core charge required.



| | Part No. | Description |
|---|----------|---|
| | FR331KT | 58-60 Power Cradle Kit with Paintable Tilt Floorshift Column - Small Block |
| | FR332KT | 58-60 Power Cradle Kit with Paintable Tilt Columnshift Column - Small Block |
| | FR334KT | 58-60 Manual Cradle Kit with Paintable Tilt Floorshift Column - Small Block |
| é | FR335KT | 58-60 Manual Cradle Kit with Paintable Tilt Columnshift Column - Small Block |
| | FR337KT | 58-60 Power Cradle Kit with Paintable Tilt Floorshift Column - Big Block |
| | FR338KT | 58-60 Power Cradle Kit with Paintable Tilt Columnshift Column - Big Block |
| | FR340KT | 58-60 Manual Cradle Kit with Paintable Tilt Floorshift Column - Big Block |
| | FR341KT | 58-60 Manual Cradle Kit with Paintable Tilt Columnshift Column - Big Block |

Power Rack and Pinion Kit Includes:

- Tilt Column
- Rack and Pinion Cradle System
- Mounting Hardware
- Aluminum Mounting Reservoir (Hoses sold separately)
- Wiring Connector
- Power Steering Pump and Pulley
- Universal Joints

Billet Swivel Floor Mount

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Power Steering Hose Kit FR1610 Sold Separately See Pg. 138



| Part No. | Description |
|----------|--|
| FR343KT | 61-62 Power Cradle Kit with Paintable Tilt Floorshift Column - Small Block |
| FR344KT | 61-62 Power Cradle Kit with Paintable Tilt Columnshift Column - Small Block |
| FR346KT | 61-62 Manual Cradle Kit with Paintable Tilt Floorshift Column - Small Block |
| FR347KT | 61-62 Manual Cradle Kit with Paintable Tilt Columnshift Column - Small Block |
| FR349KT | 61-62 Power Cradle Kit with Paintable Tilt Floorshift Column - Big Block |
| FR350KT | 61-62 Power Cradle Kit with Paintable Tilt Columnshift Column - Big Block |
| FR352KT | 61-62 Manual Cradle Kit with Paintable Tilt Floorshift Column - Big Block |
| FR353KT | 61-62 Manual Cradle Kit with Paintable Tilt Columnshift Column - Big Block |

| Part No. | Description | |
|----------|--|--|
| FR355KT | 63-64 Power Cradle Kit with Paintable Tilt Floorshift Column - Small Block | |
| FR356KT | 63-64 Power Cradle Kit with Paintable Tilt Columnshift Column - Small Block | |
| FR358KT | 63-64 Manual Cradle Kit with Paintable Tilt Floorshift Column - Small Block | |
| FR359KT | 63-64 Manual Cradle Kit with Paintable Tilt Columnshift Column - Small Block | |
| FR361KT | 63-64 Power Cradle Kit with Paintable Tilt Floorshift Column - Big Block | |
| FR362KT | 63-64 Power Cradle Kit with Paintable Tilt Columnshift Column - Big Block | |
| FR364KT | 63-64 Manual Cradle Kit with Paintable Tilt Floorshift Column - Big Block | |
| FR365KT | 63-64 Manual Cradle Kit with Paintable Tilt Columnshift Column - Big Block | |

65-74 Impala / Caprice Power Rack & Pinion Cradle System



The new Flaming River 1965-69 Impala/Caprice Power Rack and Pinion Cradle Kit has over 6" of travel, provides full lock-to-lock turning radius, and has an adjustable pinion angle. This kit uses a travel bar design to properly position the steering pivot points to the original location and deliver the original turning radius. The travel bar system features a stabilizer guide clamp that provides added stability while driving. Our Rack

and Pinion system uses the factory tie rods to connect the travel bar to the vehicle's spindles. This kit installs in the original mounting holes for the steering box and idler arm assembly, and does not require any cutting, drilling, or welding, and installs using basic hand tools. This is a completely new unit, and is Made in the USA. No core charge required.

| Part No. | Description |
|----------------|---|
| Floor Shift | Tilt Column |
| FR369 | 65-66 Power Cradle Kit with Paintable Tilt Column |
| FR370 | 69-74 Power Cradle Kit with Paintable Tilt Key Column |
| No Column Kits | |
| FR369NC | 65-66 Power Cradle - This kit includes P/S Pump, U-Joints and |







Power Rack and Pinion Kit Includes:

- Tilt Column
- Mounting Hardware
- Wiring Connector
- Universal Joints
- Rack and Pinion Cradle System
- Aluminum Mounting Reservoir (Hoses sold separately)
- Power Steering Pump and Pulley

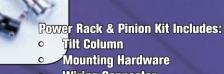






- One piece formed cradle design
- Built in skid protection
- Solid Plate Steel 3/8 inch for increased strength
- Features new front steer power tubular style rack and pinion
- Rack and pinion features .98 inch rack shaft for increased strength and cast servo valve for cooler operation
- Includes Tilt Column with GM Ignition Key for easier installation and convenience
- Lifetime Serviceability and Flaming River Tested and Certified





- Wiring Connector
- Universal Joints and shafting
 Rock and Dinion Gradus System
- Rack and Pinion Cradle SystemPower Steering Pump and Pulley
- Aluminum Mounting Reservoir (Hoses sold separately)

1962-67 Nova - Chevy II Power & Manual Rack & Pinion Cradle System



Front Steer Rack and Pinion improved clearance allows the use of virtually any oil pan. The front steer design is achieved by reversing the OE spindle arms. This moves the rack forward and out of the way of the oil pan as well as accommodating both Big Block and Small Block Engines. The Quick Ratio Power Rack and Pinion Cradle Systems replace the early long shaft steering box in the 62-67 Nova. The true fixture welded mounting cradle fits between the frame rails and bolts in place using the original chassis location. The system installs easily using simple hand tools, and provides Full Turning Radius with a much more responsive steering system than the original.

- All NEW Power Rack and Pinion
- Full Turning Radius with more than 6 inches of travel
- Adjustable Billet Mounts
- Bolts into existing chassis with no suspension modification
- Tilt Column and mounting hardware included
- Pressure and Fluid Tested and Certified

The Quick Ratio Manual and Power Rack and Pinion Cradle Systems replace the early long shaft steering box in the 62-67 Nova. The true fixture welded mounting cradle fits between the frame rails and bolts in place using the original chassis location. The system installs easily using simple hand tools, and provides Full Turning Radius with a much more responsive steering system than the original

| | Part No. | Description |
|------------|-------------|--|
| Rear Steer | | |
| | FR305KT | 62-66 Manual Cradle Kit with Paintable Tilt Column |
| į | FR305KTPW | 62-66 Power Cradle Kit with Paintable Tilt Column |
| | FR305PWNC | 62-67 Power Cradle Kit - No Column |
| | Front Steer | |
| | FR305FS | 62-66 Power Cradle Kit with Paintable Tilt Column |
| | FR305FSM | 62-66 Manual Cradle Kit with Paintable Tilt Column |

Power Rack and Pinion Kit Includes:

- Tilt Column
- Mounting Hardware
- Wiring Connector
- Universal Joints
- Patented Rack and Pinion Cradle System
- Aluminum Mounting Reservoir (Hoses sold separately)
- Power Steering Pump and Pulley



68-74 Nova Power & Manual Rack & Pinion Cradle System



Designed for Big Block and Small Block Chevy applications with stock style oil pans.

with full turning radius,

hours) using the existing

installs easily (within

chassis hole locations

and is available with or

without steering column.

Column Adapter included

Stronger Rack Gear

- 1 inch diameter More than 6 inches of travel and Full **Turning Radius**

Bolts into Existing Chassis with no Suspension **Modification**

Fluid and Pressure Tested and Certified

| Part No. | Description | |
|----------------|--|--|
| Floor Shift Ti | Floor Shift Tilt Column | |
| FR367PW | 68 Power Cradle Kit with Paintable Tilt Column | |
| FR367MN | 68 Manual Cradle Kit with Paintable Tilt Column | |
| FR368PW | 69-74 Power Cradle Kit with Paintable Tilt Key Column | |
| FR368MN | 69-74 Manual Cradle Kit with Paintable Tilt Key Column | |
| No Column Kits | | |
| FR367NC | 68-69 Power Cradle - This kit includes P/S Pump, U-Joints and accessories. | |



Aluminum Mounting Reservoir

(Hoses sold separately)

Power Steering Pump and Pulley

Billet Swivel Floor Mount





1967-72 Chevy C-10 Power Rack and Pinion Cradle System



| Part No. | Description |
|------------|--|
| FR319KT | Power Cradle System w/Mill Finish Columnshift Tilt Column |
| FR319KTPL | Power Cradle System w/Polished Columnshift Tilt Column |
| FR319KTFS | Power Cradle System w/Mill Finish Floorshift Tilt Column |
| FR319KTFPL | Power Cradle System w/Polished Floorshift Tilt Column |
| FR319KTNC | Power Cradle System w/No Column |

Shown with optional LED Indicator



- Tilt Column
- Mounting Hardware
- Wiring Connector
- · Universal Joints and shafting
- Rack and Pinion Cradle System
- Power Steering Pump and Pulley
- Aluminum Mounting Reservoir (Hoses sold separately)
- Billet Swivel Floor Mount

Check out our Install video

KRC Power Steering Pump & Accessories

See page 168 for more power steering information



Hi-Rev Pump FR1590 Satin Finish FR1590PL Polished Finish

Flaming River now introduces a direct, bolt in replacement power steering pump for an alternative to all vehicles using GM II power steering systems. Engineered and assembled by KRC Power Steering, this pump was designed with the same standards as KRC's racing pumps. The High Rev Flaming River pump allows for adjustable flow control fitting technology.

- Nine Changeable Flow Control Fittings To Aid In Driver Feel (sold separately)
- 2.22 Gpm Is The Standard Fluid Flow Rate;
 1.05 Gpm To 3.17 Gpm Are Optional with Flow Control Fittings (Sold Separately)
- 1600Psi Pressure Relief Valve
- Press On Pulley (5/8" Shaft)
- Hard Coated Rear Cover For Pump Longevity
- Less Cavitation And More Durable Than GM Type II Pumps
- Fully Manufactured In The United States
- Packaged With Warranty Card, Registration Card, And Full Installation Instructions



<u>5/8" Sha</u>ft



FR1639 90° Fitting Only

Flow Control Fittings

Available in Standard and High Performance Flow Rates

| Part No. | Description | |
|----------|----------------------|---------------|
| FR1637KT | More Assist: B-C-D-E | |
| FR1638KT | Less Assist: 4-5-6-7 | Sold Separat |
| | | j ooiu ochaia |



65-70 Mustang *Road Race* Power Rack & Pinion Cradle System

Road Race 1965-70 Mustang Bolt-in Power Rack and Pinion Cradle Kit with Travel Bar

New road race kit is adjustable to accommodate lowered cars, as well as various front end and steering geometry configurations for road racing. American made. Features and Benefits:

- One-piece travel bar has two mounting holes on each side to easily adjust the pivot points to accommodate lowered vehicles and reduce bump steer
- All-new power rack and pinion offers a full 6" of travel
- Made in USA

Laser-Cut Collapsible Straight Motorsports Column FR3307

This basic, straight-tube design is for competition use. Mill finish 304 Grade Stainless tube with 1.75" Dia. Features 3/4"-36 output shaft. Upper shaft end is 3/4" smooth to accept a quick-release steering wheel hub. Diamond laser-cut collapsible column is also available for added safety.



| Part No. | Description |
|-------------|--|
| FR330PWKT | Power Kit - Floor Shift Paintable Tilt Column |
| FR330PWKTPL | Power Kit - Floor Shift Polished Tilt Column |
| FR330PWNC | Power Kit - No Column |



65-70 Mustang Power Rack & Pinion Cradle System

An all-new power steering conversion system is now available for the classic Mustang-adding modern driving comfort and performance. Our patented cradle design mounts in the original chassis location-no suspension

modification required and the center support does not have to be removed. All kits available with or without Tilt Column. Fits 289 – 302 ci engines. Flaming River Exhaust Headers recommended.

| | Part No. | Description | |
|---|------------|--|--|
| | FR300PW1 | Power Kit - Floor Shift Paintable Tilt Column | |
| | FR300PW1PL | Power Kit - Floor Shift Polished Tilt Column | |
| ۱ | FR300NP1 | Power Kit - No Column | |



Tilt Column included with Cradle Kits

Ultra-Angle Exhaust Headers FR500030

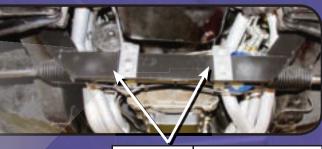
Rack and Pinion Kit Includes:

- All new Billet-Power™ Rack and Pinion
- Patented Rack and Pinion Cradle System
- All Mounting Hardware required for installation
- Wiring Connector
- Universal Joints and Shafts
- Power Steering Pump and Pulley
- Aluminum Mounting Reservoir

Riser Kit will allow for ride height adjustment







| Part No. | Description |
|-----------|-----------------------------------|
| FR20060MU | Cradle Rack & Pinion Riser Kit |

65-70 Mustang Manual Rack & Pinion Cradle System



Flaming River has designed a direct boltin manual rack and pin- (with or without ion steering system for vour Classic Mustang! The custom designed quick ratio rack and pinion offers full turning radius and travel with 3-1/2 turns lock to lock. The patented cradle technology mounts in the original chassis hole locations with no modification required.

Kits are designed to work with Small Block,

Big Block, 351W and 351C engine styles headers)

- **Full turning radius**
- **Quick Ratio Rack &** Pinion with 3-1/2 turns lock to lock
- No chassis or suspension modifications required
- Kits can be purchased with or without Tilt **Steering Column** Lifetime Serviceability

Rack and Pinion Cradle Kit Includes:

- **Tilt Column**
- **Grade 8 Mounting Hardware**
- **Wiring Connector**
- **Universal Joints**
- **Shaft Support Bearing**
- **Patented Rack and Pinion Cradle System**



49-51 Ford Power Rack & Pinion Cradle System



| • | All NEW Power Rack |
|---|--------------------------|
| | and Pinion with Lifetime |
| | Serviceability |
| | |

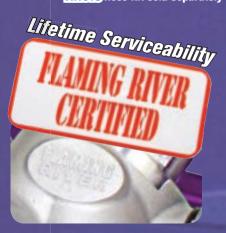
- Stronger Rack Gear
 1 inch diameter
- More than 6 inches of travel and Full Turning Radius
- Bolts into Existing Chassis with no Suspension Modification
- Fluid and Pressure Tested and Certified







FR1610 Hose Kit Sold Separately





Rack and Pinion Cradle Kit Includes:

- Tilt Column
- Mounting Hardware
- Wiring Connector
- Universal Joints
- Patented Rack and Pinion Cradle System
- Aluminum Mounting Reservoir (Hoses sold separately)

60-65 Comet / Falcon Power Rack & Pinion Cradle Systems



Rack and Pinion Kit Includes:

- All new Billet-Power™ Rack and Pinion
- Patented Rack and Pinion Cradle System
- All Mounting Hardware required for installation
- Wiring Connector
- Universal Joints and Shafts
- Power Steering Pump and Pulley
- Aluminum Mounting Reservoir



Hose Kit Sold Separately

A complete Power Rack and Pinion Conversion System is now available for the 1960-65 Ford Comet/Falcon for improved steering and handling performance. No cutting, drilling, or welding is required for installation—the kit simply bolts into the vehicle's original mounting holes using basic hand tools. This power rack kit is available with a Floor Shift Tilt Steering Column, Column Shift Tilt Steering Column Column at all A brand new Fillet.

Power™ Rack and Pinion is included and provides more than 6" of travel and full turning radius: Lock-to-Lock, Stop-to-Stop. Every Flaming River Power Rack and Pinion is Made in the USA, is fluid and pressure tested before it leaves our facility and comes with lifetime serviceability.

Flaming River also offers coated Small Block Ford Long Tube Exhaust Headers to eliminate clearance issues

FR500036.

Power Steering Hose Kit FR1610

- Crimped fittings on all pressure ends-eliminates banjo fittings
- Can be mounted straight off AN fittings or at 90 degrees
- AN fittings included for convenience of assembly
- Hose angles can be rotated to almost any position
- Custom hose lengths available through our custom hose program

FR21018 Comet/Falcon Floor Shift Paintable Tilt Column



Column manufactured with a GM-Style 11/16"-36 top shaft. Use with aftermarket Steering Wheel (See pgs 80-89)

55-57 Thunderbird Power Rack & Pinion Cradle System



 All NEW Power Rack and Pinion with Lifetime Serviceability

Stronger Rack Gear 1 inch diameter

 More than 6 inches of travel and Full Turning Radius

 Bolts into Existing Chassis with no Suspension Modification

Fluid and Pressure Tested and Certified

| Committee of the Commit | |
|--|--|
| Part No. | Description |
| FR314KT1 | Power Kit - Floor Shift Paintable Tilt Column for Aftermarket Steering Wheel |
| FR314KT1PL | Power Kit - Floor Shift Polished Tilt Column for Aftermarket Steering Wheel |
| FR314KT2 | Power Kit - Floor Shift Paintable Tilt Column for Stock Steering Wheel |
| FR314KT2PL | Power Kit - Floor Shift Polished Tilt Column for Stock Steering Wheel |



Rack and Pinion Cradle Kit Includes:

- Paintable or Polished Tilt Column
- Mounting Hardware
- Wiring Connector
- Universal Joints
- Patented Rack & Pinion Cradle System
- Power Steering Pump with Bracket and Pulley
- Aluminum Mounting Reservoir (Hoses sold separately)

1962-64 Galaxie Power Rack & Pinion Cradle System



Note: For modular motors only.
Standard column is designed for
aftermarket steering wheel - Ford
Spline also available.

New Cradle Rack & Pinion system designed for Ford Galaxie and other full-size Fords provides power steering for modern driving comfort - especially when parking. The cradle mounts in the original chassis location with no chassis modification and the center support does not have to be removed.

Note: Outer Tie Rod Ends should be 11/16"-18 Male thread

- All NEW Power Rack and Pinion with Lifetime Serviceability
- Stronger Rack Gear 1 inch diameter
- More than 6 inches of travel and Full Turning Radius
- Bolts into Existing Chassis with no Suspension Modification
- Includes adapter fitting for your existing pump
- Mustang II style tie-rod ends required for this application
- Fluid and Pressure Tested and Certified



Rack and Pinion Cradle Kit Includes:

- Tilt Column
- Mounting Hardware
- Wiring Connector
- Universal Joints
- Patented Rack and Pinion Cradle System
- Aluminum Mounting Reservoir (Hoses sold separately)







RIVER

Right Hand Drive Power Rack & Pinion The new Right Hand Drive . All NEW Power Rack Cradle System

The new Right Hand Drive
Rack and Pinion Systems
were requested by the
Australian marketplace and
we delivered. These Power
Rack kits provides easy
conversion from steering box
to an all new rack and pinion
steering system. The kit
features our new

Billet-Power™ Rack and
Pinion with more than
6 inches of travel for
full turning radius.

- All NEW Power Rack and Pinion with Lifetime Serviceability
- Billet-Joint® and Column
 Adapter included
- Stronger Rack Gear 1 inch diameter
- More than 6 inches of travel and Full Turning Radius
- Bolts into Existing
 Chassis with no
 Suspension Modification
- Fluid and Pressure Tested and Certified

| | | J 57,290, > 30 |
|--------------|--|---|
| | | FLIA STATE OF THE |
| ~ | edilling. | |
| | • | |
| | | |
| Part No. | Description | Qual |
| Corvette | | |
| FR312PWRHC | 63-82 RHD PWR VETTE CONVERSION - W/O COLUMN, PUMP | |
| FR312RH | 63-82 VETTE MANUAL KIT RHD | |
| 55-57 Chevy | | |
| FR322PWRH | 57 CHEVY RHD US CONV KIT NO COL | |
| FR322PWRHGS | 57 CHEVY RHD US CONV KIT W/GS | |
| FR323NPP | RHD TRI-5 PWR KIT W/O COL&PMP | EN EN |
| FR323PWRH | 57 CHEVY RHD OEM KIT NO COL | |
| FR324PWRHPL | 55-56 CHEVY RHD OEM KIT POL GS | |
| FR325PWRH | 55-56 CHEVY RHD OEM KIT PAINT FS | <u> </u> |
| FR325PWRHPL | 55-56 CHEVY RHD OEM KIT POL FS | |
| FR325PWRHPLC | 55-56 CHEVY RHD OEM KIT PL COL FS | |
| FR325PWRHUS | 55-56 CHEVY RHD US CONV PAINT FS | |
| FR326PWRH | 57 CHEVY RHD KIT W/ FS COL | |
| FR326PWRHPL | 57 CHEVY RHD KIT W/ FS COL POL | |
| FR327PWRH | 57 CHEVY RHD KIT W/ GS COL | |
| FR327PWRHPL | 57 CHEVY RHD KIT W/ GS COL POL | Please verify starter and |
| Mustang | | exhaust clearance |
| FR328PWRH | 65-70 RHD MUST POWER KIT | |
| FR328PWRHPL | 65-70 RHD MUST POWER KIT POL | |
| FR329RH | 65-70 RHD MUST MANUAL KIT V8 | |
| FR329RHPL | 65-70 RHD MUST MNL KIT V8 POL | |

Rack & Pinion Accessories

Flaming River Pump



LS3 Power Steering Pump Extended AN Fitting Part No. - FR1684

PAIT NO. PAID SA

AN Fitting Kit
(To allow clearance
for LS Motors)
Part No. - FR1632
includes:

(1) M14 X 1.5-AN6 Pressure Fitting

(1) M16 X 1.5-AN6 Return Fitting

(2) **O-Rings**

Variable Pressure Low-Flow Pump (3/4" Shaft Size)
FR1570 (w/o Pulley)
FRPMPSB-V (w/ V-Belt Pulley
pre-assembled for easy installation)
FRPMPSB-S (w/ 7 groove S-Belt Pulley
pre-assembled for easy installation)

The intelligent design of this pump allows for pressure reduction at higher RPMs for maximum control during highway driving and easy steering in parking situations. Remote reservoir FR1614 required.

| Pump Speed | Pressure | Flow |
|------------|----------|----------|
| 465 RPM | 4.58 MPA | 2.16 LPM |
| 1500 RPM | 1 MPA | 6.8 LPM |
| 5000 RPM | 1 MPA | 5.16 LPM |





- Crimped fittings on all pressure ends eliminates banjo fittings
- Can be mounted straight off AN fittings or at 90 degrees
- AN fittings included for convenience of assembly
- Hose angles can be rotated to almost any position
- Custom hose lengths available through our custom hose program

Hose Kit Sold Separately







Power steering pumps require a hose with a vacuum rating of 28 INCHES/HG on the inlet side, and a minimum ½"inside diameter. This is required to keep the hose from collapsing at higher RPMs. As seen in Photo 1 to the left, common hydraulic hose may have a -10 fitting on them, but the inside diameter is smaller than -6 (.265"). This will damage the pump because there is no way for the pump to intake enough fluid to meet its requirement through such a small hole.

Push-lock hose may be the proper inside diameter, but the vacuum rating is only 18 INCHES/MG. As the fluid warms up, this rating actually goes down. Push-lock hose will suck shut anywhere there is a bend in it, starving the pump of fluid and can cause severe damage to the internals of the pump. See Photo 2. The -6 pressure hose, leaving the pump, must have an operating pressure of 2,250 psi. and an inside diameter of .31". Common hydraulic hose may have the proper operating range,

but their inside diameter is slightly smaller.

See Photo 3. The smaller diameter can restrict the flow to the steering gear. This can cause

problems in your steering, such as tight spots in the turns and increased driver effort. Also make sure the -10 feed line from the reservoir tank, remote tanks only, has a ½" inside diameter. Some companies have been importing tanks to the U.S. that have a 3/8" inside diameter. This will restrict flow to the pump and will damage the pump within a few races.



Cradle Rack & Pinion Riser Kit for 65-70 Mustang
Part No. - FR20060MU



| Part No. | Description | |
|----------|--------------------------------------|--|
| FR1612 | Small Block Chevy Flaming River Pump | |
| FR1613 | Big Block Chevy Flaming River Pump | |
| FR1591 | KRC Pump SB Bracket | |

aluminum tension adjuster and mounting hardware.

Manufactured using precision laser machinery.





steering clearance you need with the performance you desire. Available for the 1955-57 Chevy, 1962-67 Nova, 1968-1970 Camaro, and for 1965-70 long tube Mustangs.

| Part No. | Coating | Application |
|----------|---------|---|
| FR50001C | Coated | 57 Chevy, Chevelle, Camaro |
| FR50003C | Coated | 65-70 Ford Mustang, Comet 289-302 with FR Power Cradle Kit |
| FR50004C | Coated | 62-67 Nova with FR Front or Rear Steer Cradle Kit |





FR50004C

Rack and Pinions



Flaming River incorporates state-of-the-art engineering, technology, precision machining and quality control in our manufacturing process.



Each Flaming River Power Rack and Pinion is pressure and fluid tested...Flaming River Certified.



The Die Cast Valve Finned Housing takes production to a new level.

| Road Race | | 45 |
|----------------------------|----|------------|
| Mustang Power 146 | | 47 |
| NEW! Chassis Builders' 148 | -1 | 49 |
| Choice Power | > | |
| 79-04 Mustang 150 | 1 | 5 1 |
| 05-14 Mustang | | 52 |
| Right Hand Drive | 1 | 53 |
| Rear Steer | 1 | 54 |
| Front Steer | 1 | 55 |
| XL Long Power | 1 | 5 6 |
| Straight Arrow | 1 | 57 |
| Street Rod Manual | | 58 |
| Custom Racks | 1 | 59 |
| Late-Model Racing 160- | -1 | 61 |
| Racing | 1 | 62 |
| Bump Steer Kit | 1 | 63 |
| Inner Tie Rod Ends, | 1 | 64 |
| Rollows Rack Accessories | | |



From Engineering Concept to Final Design, Flaming River manufactures all new power rack and pinions.

The Faro Arm, a state-of-the-art digital measuring device, is used to precisely measure precision tolerances.







Rack and Pinions



| Omni Rear Steer Manual Rack & Pinion | | |
|--------------------------------------|---|--|
| Part No. | Description | |
| FR1507-2 | 45" OAL Manual Rear Steer Rack | |
| FR1507-3 | 41.69" OAL Manual Rear Steer Rack | |
| FR1507-4 | 45" OAL Standard Pinion, Wide Pivot (27") | |

| F | Front Steer Power Rack & Pinion | | |
|---|---------------------------------|------------------------------|--|
| F | Part No. | Description | |
| G | R40001 | 74-78 Mustang II 16" Mounts | |
| G | R40002 | 79-93 Mustang 15 1/2" Mounts | |
| G | R40003 | 94-04 Mustang 15 1/2" Mounts | |
| | | | |



| Front Steer Manual Rack & Pinion | | |
|----------------------------------|---|--|
| Part No. | Description | |
| FR1502 | 74-78 Mustang II 16" Mounts | |
| FR1503 | 79-93 Mustang 15 1/2" Mounts - 20:1 Ratio | |
| FR1520 | 79-93 Mustang 15 1/2" Mounts - 15:1 Ratio | |
| FR1508 | 94-04 Mustang 15 1/2" Mounts - 20:1 Ratio | |
| FR1508Q | 94-04 Mustang 15 1/2" Mounts - 16:1 Ratio | |



| Pinto Front Steer Manual Rack & Pinion | | |
|--|--|--|
| Part No. | Description | |
| FR1501 | Pinto Manual Front Steer Rack | |
| FR1501-2 | 5" Shortened Pinto Manual Front Steer Rack | |



| Cobra/MGB | Manual | Rack | & | Pinion |
|-----------|--------|------|---|--------|
| | | | | |

| Part No. | Description |
|----------|-------------|
| | |

FR1512 | Manual Rack & Pinion with 3 turns lock to lock



| Custom Front Steer Manual Rack & Pinion | | |
|--|---|--|
| Part No. | Description | |
| FR1502-2x2 | 2" Shorter 74-78 Mustang II 14" Mounts | |
| FR1502-3x3 | 3" Shorter 74-78 Mustang II 13" Mounts | |
| FR1502-4x4 | 4" Shorter 74-78 Mustang II 12" Mounts | |
| FR1503-3x3 | 3" Shorter 79-93 Mustang 12 1/2" Mounts | |



Rack and Pinions



Every rack and pinion built at Flaming River is pressure and fluid tested.

Please note: Contamination in the system will void any warranty on rack and pinions. Since every rack has been tested prior to shipping, any review for repair of rack will be at an additional charge.

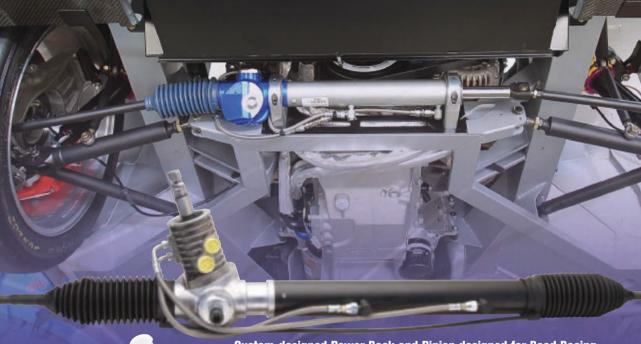
Lifetime Serviceability



This product can expose you to chemicals including hexavalent chromium, which is known to the State of California to cause cancer.



Road Race Power Rack and Pinion





Variable Pressure Low-Flow Pump FR1570 See pg 138

Custom-designed Power Rack and Pinion designed for Road Racing. FR40040 - Custom

Features:

- Quick Ratio Design Rack gain of 2.27" per one revolution of the pinion
- Adjustable positive-lock rack gear will not back away from pinion
- Travel can be customized at the factory for specific applications
- Fluid and pressure tested and certified
- Braided stainless pressure lines for low-profile design and added clearance
- Made in the USA

Benefits:

- 1 inch dia. rack gear made of hardened and precision-ground 1040 steel for longevity and strength
- Maintains positive mesh between rack gear and pinion gear, which is ideal for racing applications
- All new components-including valve, piston, seals, bearings, bushings and rack gears
- Lifetime serviceability



Positive Torque Adjustment



Mustang Power Rack and Pinions





The only ALL NEW Mustang II (74-78) style Power Rack & Pinion available for Hot Rodders!

The Billet-Power™ Front Steer Rack and Pinion (Mustang style) is designed to fit Mustang II applications (15.5" or 16" available). Made from all new components, including a new valve and piston, our Power Rack offers over 6-inches of travel, which provides the maximum turning radius for classic and street rod applications. Each Flaming River Power Rack is proudly Made in the USA, and is fluid and pressure tested and certified before leaving our facility.

- All new components Including valve, piston, seals, bearings and bushings, and pinion and rack gears
- More than 6 inches of travel for full turning radius
- Lighter Approximately 12 Lbs. lighter than OE
- Stronger 1 inch diameter Rack Shaft
- Sleek, attractive powder coated design
- Longer cylinder and overlapping tube design for rack stability
- Lifetime Serviceability
- Test Certification included with each unit

Precision Steel Power Steering Pump Bracket
This power steering pump bracket is for Stage
II style pumps and features a revolutionary
new design-made of black oxide steel and
available for Small Block and Big Block vehicle
applications. Features an adjustable design that
allows for use with short neck and long neck
water pumps. Includes a billet aluminum tension
adjuster and mounting hardware. Manufactured
using precision laser machinery.

| Part No. | Description |
|-----------|--|
| FR40001 | 16" Mounts |
| FR40001-V | 16" Mounts - with P/S Pump and V-Belt Pulley |
| FR40001-S | 16" Mounts - with P/S Pump and Serpentine Belt Pulley |
| FR40002 | 15-1/2" Mounts |



Lifetime Serviceability

Flaming River Certified
The Flaming River Certified imprinted logo
stamped indicates that each of our products have
been tested to exacting standards.



| Part No. | Description |
|----------|--------------------------|
| FR1612 | Small Block Chevy |
| FR1613 | Big Block Chevy |
| FR1630 | 2.5" Belt Tensioner Only |
| FR1631 | 3.5" Belt Tensioner Only |

VARIABLE PRESSURE

Power Rack & Pinion Pump System All New...All The Time!

Pressure and Return Valve Ports clearly marked on every power rack and pinion. The Flaming River Power Rack is the first new Power Rack and Pinion designed with the street rodder in mind. With the pump, it is properly calibrated to avoid over-steer. The Power Rack uses Mustang II 16-inch center mounts and FR1601 outer ends. Our Power Rack is designed for maximum front end vehicle weight of 1.750 Lbs.



LS3 Power Steering Pump Extended AN Fitting Part No. - FR1634



Variable Pressure Low-Flow Pump (3/4" Shaft Size) FR1570 (w/o Pulley) FRPMPSB-V (w/ V-Belt Pulley pre-assembled for easy installation) FRPMPSB-S (w/ 7 groove S-Belt **Pulley pre-assembled for easy**

installation)

The intelligent design of this pump allows for pressure reduction at higher RPMs for maximum control during highway driving and easy steering in parking situations. Remote reservoir (FR1614) required. See pg 138



Part No. **Description** FR1632 **AN Fitting Kit**



Hose Kit Sold Separately Stainless Braided Hose Kits - FR1610 This remote reservoir style hose kit includes stainless braided lines with fittings for installing Flaming River Power Rack and Pinion with a remote reservoir. Simplifies installation with a clean, polished appearance.

Part No.

FR1614

FR1614BK

FR1614PL

FR1615

FR1616

Description

Power Steering

Machine Finish

Power Steering

Power Steering

Coolant Overflow

Polished

Brake Fluid

Black Powder coat

Aluminum Remote Reservoir Our Remote Reservoirs feature a threaded cap and two machined billet brackets. A sleek radius design will complement any engine compartment. **Recommended for use with Flaming River Power Rack** Systems, but can also be used with other Stage II Pumps.

Machine finish shown





79-04 Mustang Power Rack and Pinion





| Part No. | Description |
|----------|-------------------------------|
| FR40037 | 1979-93 Power Rack and Pinion |
| FR40039 | 1994-04 Power Rack and Pinion |



FR1635

Fitting Adapter Kit to attach to your original pump. Includes return fitting and hose and pressure line adapter.



Installation Kit Includes:

- Two Universal Joints/ Shaft Kit
- Outer Ends
- Two-piece Urethane Bushing

Shaft Kit Only: 79-93 FR1504P2 94-04 FR1504P3





Long Tongue FR9950TLG

Longer length tongue available for use with 79-93 Mustang shaft kits. This longer tongue is the perfect way to extend the universal joints down from the column to make even more room for larger tube headers. Sold Separately.



Variable Pressure Low-Flow Pump FR1570 See pg 138

FR1890 Shown

79-04 Mustang Manual Rack and Pinions



1979-93 Mustang Deluxe Manual Rack & Pinion Installation Kit – Standard Ratio - FR1890

This installation kit is a direct bolt-in replacement for the 1979-93 5.0L Mustang. It eliminates the power rack, pump, pulley, and rag joint for a total vehicle weight reduction of up to 30 Lbs., and provides smooth responsive vehicle steering.

Kit Includes:

- Manual Rack and Pinion FR1503
- High Performance Needle-Bearing U-Joint Shaft Kit
- Manual Tie Rod Ends FR1603
- 2-Piece Mounting Bushings



1979-93 Mustang High Performance Shaft Assembly FR1504P Power Rack FR1504M Manual Rack

This high performance shaft kit utilizes two smooth, needle bearing Universal Joints, a prefabricated shaft to bolt directly into the column, and weldless intermediate shaft for easy installation. This long-wearing design eliminates the rag joint for better steering response, streamlined appearance and improved header clearance. An absolute must when using large tube headers. The overall length is 13 inches. Additional DD shaft can be ordered for applications requiring longer length. This can be used with our Manual Rack and Pinion or the factory Power Rack to eliminate the rag joint and improve steering response!

1994-04 5.0L Mustang Manual Rack and Pinion Installation Kit - FR1892

This installation kit is a direct bolt-in replacement for the 1994-03 5.0L Mustang without hydro boost (non-modular motors). This kit allows for a total vehicle weight savings of up to 30 Lbs. off of the front end-where it matters most!

Kit Includes:

- Manual Rack and Pinion FR1508
- Universal Joint
- Outer Tie Rod Ends FR1603-L
- 2-Piece Mounting Bushings

Also available: Deluxe Kit with

FR1892D

Complete Shaft Kit



This shaft kit is a direct bolt-in replacement for the factory steering of the 1994-04 5.0L Mustang. With a 1-1/2" diameter, this kit greatly improves header clearance. Needle-bearing universal joint included.

FR1509P - Power Shaft Kit

FR1509M - Manual Shaft Kit

Vibration Dampener Kits also available:

FR1509-VP - Vibration Power Shaft Kit

FR1509-VM - Vibration Manual Shaft Kit



1979-93 Mustang Low-Profile Shaft Kits Forged True®

This lightweight, low-profile kit weighs only 2.5 Lbs. and features 40° angle capability and 1.25" diameter for increased header clearance. A black oxide finish resists corrosion. Rated at 350 ft. Lbs.

FR1504MFT - Low-Profile Manual Shaft Kit FR1504PFT - Low-Profile Power Shaft Kit

Chrome Moly

FR1504MLP - Low-Profile Manual Shaft Kit FR1504PLP - Low-Profile Power Shaft Kit 1979-93 5.0L Mustang Manual Rack and Pinion – 15:1 Quick Ratio - FR1520

This quick steer unit is designed for the 1979-93 Mustangs and delivers exceptional performance. Ideal for road racing, street, drag, and other applications where a very responsive steering system is required.

3.3 turns lock-to-lock (25% faster than a standard unit)
5.25" of rack travel
45" overall length

05-14 Mustang Manual Rack and Pinions



FR1515

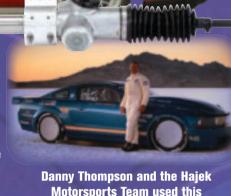
Our customers asked for it and we delivered – Introducing the 2005-2014 Mustang Manual Rack & Pinion! The newest addition to Manual Rack & Pinion steering is lighter than the factory Mustang power system - reducing vehicle weight by 10-15 Lbs. (depending on vehicle specifications) by eliminating hoses, pulleys and pumps. Also, the billet aluminum mounting brackets can be adjusted to modify the pinion angle for large tube headers and engine swaps in custom applications.

Please Note: This specific Rack requires a 9/16"-26 U-Joint for installation.

Product Specs:

- Bolts into same mounting location as OEM Power Rack
- 54-1/2" overall length
- 3-3/4 turns lock to lock
- 14" mounts center to center
- 1/2" diameter mounting holes
- 9/16"-26 spline pinion shaft
- 13" inner ends
- M14 X 1.5 X 2.5" inner tie rod end thread

- Bolts up to OEM Mount
- Uses stock outer tie rod ends
- Weighs only 14 Lbs.
- Billet Mounts included
- Adjustable pinion angle
- Made in the USA with Lifetime Serviceability



Danny Thompson and the Hajek Motorsports Team used this Manual Rack & Pinion in their 2010 E-85 Mustang—the fastest production-based Mustang in the world!



05-14 Mustang Shaft FR1515P-SHFT Provides Additional Header Clearance











Right Hand Drive Power Rack and Pinions

Made of all new components, including a new valve and piston, this Power Rack and Pinion is now designed for Right Hand Drive vehicles. As custom cars have become more popular around the world, we have had increasing interest in Rack

and Pinions for custom Right Hand Drive applications. The most exciting aspect of the new RHD Power program is that it is not limited by core availability, since Flaming River Rack and Pinions are all new, and never rebuilt.

| Part No. | Description |
|----------|--|
| FR40023 | Power RHD Front Steer Rack & Pinion |
| FR40024 | Power RHD Rear Steer Rack & Pinion |

- All new components Including valve, piston, seals, bearings and bushings, and pinion and rack gears
- Stronger rack shaft almost 1 inch diameter
- More than 6 inches of travel for full turning radius
- Sleek, attractive powder coated design
- Universal, precision 6061 aluminum, billet mounting
- Billet finned housing provides heat reduction
- Lifetime Serviceability



Rear Steer Power Rack and Pinions



Full Turning Radius More Than 6" of Travel Lifetime Serviceability

- All new components Including valve, piston, seals, bearings and bushings, and pinion and rack gears
- Stronger rack shaft almost 1 inch diameter
- More than 6 inches of travel for full turning radius
- Sleek, attractive powder coated design
- Universal, precision 6061 Aluminum, billet mounting
- **Lifetime Serviceability**

The Billet-Power® Rear Steer Rack & Pinion is made of all new components, including the valve and piston, and is designed to fit any classic rear steer vehicle (mounts behind the spindle). Billet mounting "pillow blocks" allow for universal mounting and the pinion shaft rotates to align with your vehicle's steering shafting. Billet finned housing provides heat reduction.



Each system includes a new Power Rack and Pinion, Pump with aluminum pulley (V-Belt or Serpentine) and fittings for connecting hoses to the hose kit of your choice. Hoses, U-Joint, and Reservoir are not included.

| Part No. | Description |
|-----------|--|
| FR40020 | 45" Rear Steer Power Rack |
| FR40020-V | 45" Rear Steer Power Rack - with P/S Pump and V-Belt Pulley |
| FR40020-S | 45" Rear Steer Power Rack - with P/S Pump and Serpentine Belt Pulley |
| FR40031 | 41.69" Rear Steer Power Rack |
| FR40031-V | 41.69" Rear Steer Power Rack - with P/S Pump and V-Belt Pulley |
| FR40031-S | 41.69" Rear Steer Power Rack - with P/S Pump and Serpentine Belt Pulley |

| Part No. | Description |
|----------|----------------------------------|
| FR1614 | Power Steering Machine Finish |
| FR1614BK | Power Steering Black Powder coat |
| FR1614PL | Power Steering Polished |
| FR1615 | Coolant Overflow |
| FR1616 | Brake Fluid |

Aluminum Remote Reservoir Our Remote Reservoirs feature a threaded cap and two machined billet brackets. A sleek radius design will complement any engine compartment. Recommended for use with Flaming River Power Rack Systems, but can also be used with other Stage II Pumps. Machine finish shown



Front Steer Power Rack and Pinions

Unlike OEM Rack and Pinions, where hard lines are set and often cause interference, our Custom Manufacturing allows you to determine where the pressure ports should be located.

Dimensionally interchangeable with the Mustang or Omni Racks-with new mounting versatility! Precision-machined billet aluminum mounts retrofit to virtually any vehicle application and feature an adjustable pinion to improve universal joint angle. The Universal Mount Power Rack and Pinion is pressure and fluid tested after assembly to ensure maximum quality and performance. Each Flaming River Power Rack comes with Lifetime Serviceability and is made in the US

- All New Components Including valve, piston, seals, bearings and bushings, and pinion and rack gears
- No Core Charge
- Stronger Rack Shaft Almost 1 inch diameter
- More than 6" of travel for improved turning radius
- Braided stainless pressure lines for low profile design and added clearance
- Finned Valve acts as a heat sink for lower fluid temperatures
- Billet Pillow Blocks Allow for adjustable pinion angle
- Racks available in 45" and 41.69" overall lengths Custom designs also available
- Made in the USA
- Lifetime Serviceability

"Pillow Blocks" allow for universal mounting and the pinion shaft rotates to align with your vehicle's steering shafting.



| Part No. | Description |
|------------|--|
| FR40022 | Front Steer Universal Power Rack - Blue Rack Housing |
| FR40022PLN | Front Steer Universal Power Rack - Standard Cast Rack Housing |
| FR40022XX | Custom Steer Universal Power Rack - Standard Cast Rack Housing |
| FR40022-V | Front Steer Universal Power Rack - with P/S Pump and V-Belt Pulley |
| FR40022-S | Front Steer Universal Power Rack - with P/S Pump and Serpentine Belt Pulley |

Shown with the Rack and Pinion Valve in the standard position with the pressure and return ports facing forward and the pressure lines in the standard position on the front of the tube.





Rack and Pinion Valve reversed allows the pressure and return ports to face the backside of the rack.



Variable Pressure Low-Flow Pump FR1570 See pg 138



Xtra Long Power Rack and Pinions

4" Longer Than Stock (No Extender Necessary)

The all new XL Front Steer
Power Rack and Pinion—
designed for wide framed
cars and trucks—eliminates
the need for an extender
and ensures that the bellow
is never overextended. The
new rack is based upon the
popular front steer 1974-78
Mustang II platform, but
is now offered in a design
that is 4" longer, for a total
length of 49" with a 28.5"

pivot-perfect for pickup trucks with a Mustang II style front end.

This is the only new power rack with over 6" of travel for full turning radius—lock to lock, stop to stop. Each rack is pressure-tested and certified (certificate included) and Made in the USA.





FR1614 P/S Reservoir Machine Finish



Cane-style baffle design in Reservoir prevents foaming in fluid



Low-Flow Pump (3/4" Shaft Size)

FR1570 (w/o Pulley)

FRPMPSB-V (w/ V-Belt Pulley

pre-assembled for easy installation)

FRPMPSB-S (w/ 7 groove S-Belt Pulley

pre-assembled for easy installation)

See pg 134



Aluminum
Remote Reservoir
Our Remote Reservoirs feature a
threaded cap and two machined
billet brackets. A sleek radius
design will complement any engine
compartment. Recommended for
use with Flaming River Power Rack
Systems, but can also be used with
other Stage II Pumps.
Polished finish shown

| Part No. | Description |
|----------|----------------------------------|
| FR1614 | Power Steering Machine Finish |
| FR1614BK | Power Steering Black Powder coat |
| FR1614PL | Power Steering Polished |
| FR1615 | Coolant Overflow |
| FR1616 | Brake Fluid |

Straight Arrow Modular Rack and Pinions

C (OVERALL DIMENSION)

Custom Billet Aluminum Manual Rack and Pinion

Flaming River's new Straight Arrow™ billet aluminum custom manual rack and pinion features cutting-edge appearance coupled with allnew components to produce a rack that delivers application flexibility, durability, strong eye-appeal and outstanding steering performance. The Straight Arrow™ racks are ideal for custom steering situations in street and motorsports applications with various rack lengths, multiple pinion lengths, over 20 different inner ties rods ends and several steering ratios. The Straight Arrow™ rack program includes

front or rear steer configurations and is available for left and right-hand steering applications. The Flaming River custom length program for the new Straight Arrow rack and pinions allows the user to specify the rack dimensions.



Standard Modular Rack & Pinion Reference Sheet

| | Front Steer | Rear Steer |
|----------|--------------|--------------|
| Part No. | FR1580 | FR1585 |
| OAL | 45" | 41 5/8" |
| Pivot | 24.5" | 23.75" |
| Mount | Pillow Block | Pillow Block |
| Tie Rods | 9/16" Male | 9/16" Male |



Street Rod Manual Rack and Pinions



1974-78 Mustang II Manual Rack and Pinion -

FR1502

This design features high-quality aluminum castings, two mounting holes (16" center to center) and a chrome-plated steel center tube.

- 5 turns lock-to-lock
- 6" of rack travel
- 45" overall length

Custom Length Mustang II Manual Rack and Pinion Custom, shortened designs of our popular Mustang II Manual Rack and Pinion are now available for Willy's, Corvette, Anglia, and other custom chassis applications. Several popular custom sizes are now offered from stock.

FR1502-2X2 FR1502-4X4

Omni Manual Rack and Pinion (Rear Steer)

FR1507-2 45" OAL FR1507-3 41.69" OAL

TRISO7-4 45" OAL, Standard Pinion, Wide Pivot (27")
This rear steer design mounts behind the crossmember and provides oil pan clearance for a Ford engine. The rack features an aluminum housing with a chrome-plated steel center tube. Designed for use with Mustang II spindles and outer tie rod ends.

- Mounting Clamp (FR1507C) available.
- 4 turns lock-to-lock
- 5" of rack travel

Also available: Omni Rack with Short Pinion -

FR1507-5

Mustang II Rack with Short Pinion -

This new version of the popular 1974-78 Mustang rack features a 1-1/2" long input shaft, which makes mounting easier and reduces the universal joint angle.

FR1501



1971-72 Pinto Manual Rack and Pinion -

FR1501

This Manual Rack and Pinion is designed to meet top chassis builders' standards for a new drag race steering system. It is designed to be sleek, lightweight, and durable—using high-quality aluminum castings and has a chrome-plated steel center tube. Weighs only 12 Lbs.

• 3.75 turns lock-to-lock • 5.25" of travel • 45.5" overall length

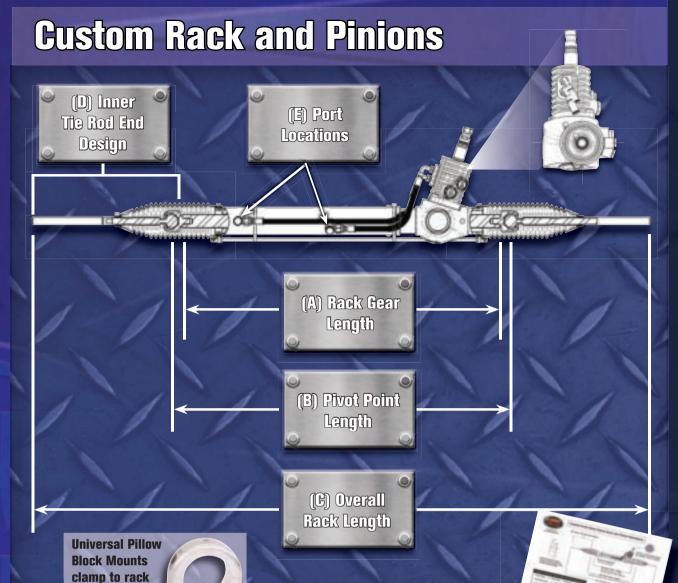


Cobra/MGB Manual Rack and Pinion -

FR1512

Flaming River now offers an all new manual rack and pinion for the Cobra and early MGB. Although this unit is dimensionally interchangeable with the original MGB rack, it uses today's technology for a smoother steering feel. The all new construction ensures extended life far superior to rebuilt units.

- 3 turns lock-to-lock
- 6.25" of travel
- 7.5" pinion length for better clearance than the original
- Spline size is 3/4"-48.
- 41" overall length



Custom racks are pre-paid, non-cancelable and non-returnable. Rack specifications must be in writing and signed by customer. Please allow 4-6 weeks from time of order.

Outer Tie Rod Ends
Designed to be the perfect
complement to our Manual Rack
and Pinions
FR1601 1974-78 Mustang
FR1603 1979-93 Mustang
FR1603-L 1994-03 Mustang

tube and allow you to rotate rack for best pinion angle to

connect steering linkage



2-Piece Mounting
Bushings FR2001
Custom designed thermoplastic
rubber for firm vibration
absorption. Two sets are required
for installation.



Mounting Bushings FR1600
Impact absorbing rubber bushings with steel core are used to mount the Mustang II Rack and Pinion FR1502
Two required.







FR1515CAM16 Camaro 2016 Overall length: Approx. 49"
Pivots: Approx. 30.25/30.38"
Mounts center to center: 11.75
(mount hole diameter: .420)
Short pinion, standard rack gain
(long pinion available)
Inner end thread is M16X1.5
Inner end length is approx. 10.38"

Overall length: Approx. 51.25" Pivots: Approx. 26.01"

Mounts center to center: 18.21 (mount hole diameter: .500)
Short pinion, standard rack gain (long pinion available)
Inner end thread is M16X1.5

Inner end length is approx. 14"

FLAMING RIVER

MADE IN

Quality Steering Systems

FR1515MPR

Mopar Challenger

2010-2016 Camaro and Challenger Racing Manual Rack and Pinions

FR1515CAM Camaro 2010-2015 FR1515CAM16 Camaro 2016 FR1515MPR Mopar Challenger

This new Manual Rack and Pinion design replaces the power rack in the Late-Model Camaro and

Challenger—resulting in significant weight savings and improved handling characteristics.

Please Note: These Racks require a FR1709DD - 9/16"-26 U-Joint for installation.

2005-2014 Mustang Manual Rack and Pinion FR1515

This new Manual Rack and Pinion design replaces the power rack in the 2005-2010 Mustangs—resulting in significant weight savings and improved handling characteristics.



- Bolts into same mounting location as OEM Power Rack
- 54 1/2" overall length
- 3 3/4 turns lock to lock
- 14" mounts center to center
- 1/2" diameter mounting holes
- 9/16"-26 spline pinion shaft
- 13" inner ends
- M14 X 1.5 X 2.5" inner tie rod end thread

Please Note: This specific Rack requires

a FR1709DD - 9/16"-26 U-Joint for installation.



Danny Thompson and the Hajek Motorsports Team used this Manual Rack and Pinion in their 2010 E-85 Mustang-clocking in at 258.4 MPH and making it the fastest production-based Mustang in the world!



Electronic Components are Non-Returnable

Timing Light

Timing Light with 20FT Lead-FR1020
This self-powered timing light is designed to work without an auxiliary power source, which makes it ideal for use with magnetos, rear battery mount race cars, motorcycles, marine, go-karts, and all spark ignition systems for hassle-free timing. "The Light" is equipped with a xenon bulb which generates a bright strobe as well as a convenient worklight. Durable construction includes a rubber encased lens and 48" pickup lead. Longer leads are available for industrial applications.

- State-of-the-art single-wire design (operated on two D-Cell batteries)
- Excellent for use with magnetos and all spark ignition systems
- Bright xenon strobe clearly visible in daylight
- Accurate timing up to 14,000 RPM
- Can be used to test circuits

Racing

Self-Powered Timing Light

- State-of-the-art single-wire design (operated on two D-Cell batteries)
- **Excellent for use with magnetos** and all spark ignition systems
- Bright xenon strobe clearly visible in daylight
- Accurate timing up to 14,000 RPM
- Can be used to test circuits



Switches



FR1013 Combination Battery and Alternator Kill Switch

This combo kill switch designed to completely shut down the battery and charging system in an emergency situation. Ideal for racing, vehicle storage, marine and RV applications. Prevents battery drain, theft, and reduces the risk

- Push Off for emergency shut-down and color-coded to indicate operating position- ON or OFF, with a durable spring-loaded design
- Meets IHRA, NHRA and SCCA sanctioning body requirements
- **Rated Capacity:**
- Battery 1200 Amp Surge
- **150 Amp Continuous**
- Alternator 120 Amp

FR1003:2 The Big Switch with Lever Kit

The lever kit allows for remote actuation of the Big Switch. The kit includes an 18" long, aluminum threaded rod, T-handle, mounting bracket and necessary hardware. A "push off" decal is included. Accepted for NHRA/IHRA competition use.

FR1006 Lever Kit Only



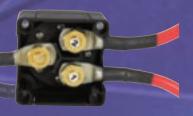
FR1010 Combination Battery and **Magneto Kill Switch**

Dual circuit switch simultaneously shuts down both the battery and magneto. Waterproof spring-loaded design with silver plated brass contacts. Rated at 250 Amps continuous service, 2500 Amps for 5 second surges. Accepted for NHRA/IHRA competition use. Furnished with an easy grip T-Handle and anodized aluminum mounting bracket.

FR1050 Dual Battery Disconnect Switch
The Dual Battery Disconnect Switch allows for two batteries to operate independent of one another, or for both to be in the ON or OFF position at the same time.

- Rated at 300 Amps continuous service, and 1000 Amps for 5 second surges.
- 12 or 24 <u>Volts</u>
- **IP 54 Rating**
- 300 Amps Continuous
- 1000 Amps Surge for 5 Seconds
 - Silver Plated Contacts









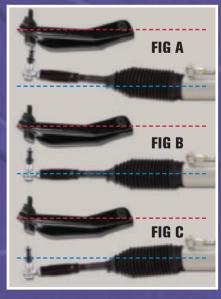
Has the height of your suspension been altered from the original specs? Flaming River now has a solution to improve your handling issue. Our new bump steer kit has been designed to assist you in re-aligning your steering geometry. Simply replace your current outer tie rod ends with the new tie rod ends, using the provided spacers to adjust the angle as needed. These adjustable outer tie rod end replacements feature 6061 T-6 aluminum, fully machined sleeve with a black anodized finish, a Teflon lined 5/8" heim joint and 4140 steel pin which. The pin is machined with the correct taper for the spindle. Teflon-lined heim reduces noise and does not require lubrication.

Viewed from the front of the car, the tie rods should be parallel to the A-arms. Figure A shows the tie rod too high. Need to add more spacers between the spindle and tie rod end. Figure B is an example of the correct spacing. Figure C shows the tie rod too low. Need to add fewer spacers between the spindle and tie rod end.

Mustang kit designed for the Granada spindle.

Please note: Bump Steer Kit can only be used with male inner ends (not furnished).

| Bump Steer Kits | | | | | |
|-------------------------------|---------------|----------|--|--|--|
| Part No. Application Spindles | | | | | |
| FR1619MU | 65-70 Mustang | Granada | | | |
| FR1619CA1 | 67 Camaro | Original | | | |
| FR1619CA2 | 68-69 Camaro | Original | | | |



Shocks, Inner Tie Rod Ends, Bellows and Rack Accessories



- Polished Aluminum Twin-Tube with a clear anodized finish
- Double Adjustable 19 Compression & 19 Rebound adjustments
- Piston Precision Machined Aluminum with a deflective disk and P.T.F.E./bronze piston seal
- Piston Rod 5/8" hard-chrome plated and centerless ground
- Advanced three-step sealing system
- Made in the U.S.A.





Inner Tie Rod Ends

| NA. | ala | _ 1 | NA a | NIO. |
|-----|-----|-----|------|------|

| Part No. | Rack End | Rack End Size | Outer End | Outer End Size | OAL | Application | |
|----------|-------------|------------------|-----------|----------------|-------|--------------------------------|--|
| 100506 | Male | M14x1.5 | Male | 9/16"-18 | 11.4" | FR40001/FR40002 Lt. Side | |
| 100587 | Male | M14x1.5 | Male | 9/16"-18 | 11.4" | FR40001/FR40002 Rt. Side | |
| FR1502IE | Male | M14x1.5 | Male | 9/16"-18 | 11.4" | FR1502 - 74-78 Mustang II | |
| FR1503IE | Male | M14x1.5 | Male | 9/16"-18 | 11.4" | FR1503/FR1520 - 79-93 Mustang | |
| FR1508IE | Male | M14x1.5 | Male | 9/16"-18 | 12.5" | FR1508/FR1508Q - 94-04 Mustang | |
| 100439 | Male | M16x1.5 | Male | M14x1.5 | 13" | 05-10 Mustang | |

Male - Female

| Part No. | Rack End | Rack End Size | Outer End | Outer End Size | OAL | Application |
|----------|----------|---------------|-----------|----------------|-------|-----------------|
| 100377 | Male | M14x1.5 | Female | 11/16"-18 | 11.5" | C-10 Cradle Kit |

Female - Male

| Part No. | Rack End | Rack End Size | Outer End | Outer End Size | OAL | Application |
|-------------|----------|----------------------|-----------|----------------|--------|--------------------|
| FR1543IE | Female | M14x1.5 | Male | M14x1.5 | 12" | GM A-Body |
| FR1501IE | Female | M14x1.5 | Male | 1/2"-20 | 11.75" | FR1501 71-72 Pinto |
| FR1507-IE2 | Female | M16x1.5 | Male | 9/16"-18 | 12" | FR1507-2 Omni |
| FR1507-3QIE | Female | M16x1.5 | Male | 9/16"-18 | 10.25 | FR1507-3Q Omni |

Female - Female

| Part No. | Rack End | Rack End Size | Outer End | Outer End Size | OAL |
|------------|----------|---------------|-----------|----------------|------|
| FRIE1003FM | Female | M16x1.5 | Female | 5/8"-18 | 10" |
| FRIE1004FM | Female | M16x1.5 | Female | 11/16"-18 | 7.75 |



| Bellow Kit | | | | | |
|------------|---------------------|--|--|--|--|
| Part No. | Parts In Kit | | | | |
| FR1501B | FR1501-P & FR1501-D | | | | |
| FR1502B | FR1501-D (qty 2) | | | | |

| Rack Bellow | | | | | | | | |
|-------------|----------------|----------------|---------------|--|--|--|--|--|
| Part No. | Inner End Side | Rack Body Size | Static Length | Application | | | | |
| FR1501-P | 7/16" | 1-1/16" | 7-1/2" | Passenger Side of Omni, Pinto, All Manual Rack Kits | | | | |
| FR1501-D | 7/16" | 1-11/16" | 6-1/2" | Driver's Side of Omni, Pinto, All Manual Rack Kits & All Mustang Manual Racks (Both Sides) | | | | |
| 100163 | 1/2" | 2" | 8" | All Flaming River Power Racks (Both Sides) | | | | |



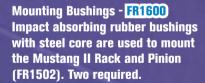
Tie Rod Adjuster Sleeves - FR1620

- 1971-72 Monte Carlo, Cutlass, Lemans, Chevelle, El Camino, Malibu,422, GTO
- 1973-77 Chevelle, El Camino, Regal, Malibu, Monte Carlo, Lemans & Cutlass
- 1970-81 Camaro & Firebird
- 1979-90 Caprice
- 1991-96 Caprice, Impala, & Roadmaster



Omni Rack Mount Clamp with Bushing - FR1507C







2-Piece Mounting Bushings FR2001

Custom designed thermoplastic rubber for firm vibration absorption. Two sets are required for installation.



Ford Explorer Mounting Bushing Kit Fits 1995-2002 FR2002KT

Outer Tie Rod Ends Designed to be the perfect complement to our Manual Rack and Pinions FR1601 1974-78 Mustang - 3.5" OAL FR1603 1979-93 Mustang - 5" OAL FR1603-L 1994-03 Mustang - 6" OAL

Steering Boxes





Brought to you in collaboration with a leading OEM supplier, these power boxes fit most GM car and light truck applications from 1960 into the 1990s. Ideal for Camaro, Chevelle, GTO, El Camino, Jeep (CJ, Cherokee, Wrangler) and light pickup trucks (up to 1/2 ton).

- Available in three ratios (12:1, 14:1, 16:1) to fit virtually any application with the steering feel you prefer.
- Trivalent Chromium Free Plating offers ten times the corrosion resistance of a painted box.
- Unique Tech billet cap included.
- Rack and Pinion Valve Spool for smooth and precise steering and handling.
- Four bolt mounting pattern also interchanges to early three bolt application.
- 3/4"-30 splined input shaft

Price
Part No. Description
FR1560 12:1 Ratio

Note: Ratios are approximate.



Power Steering Hoses

Things we all need to know and do when it comes to power steering:

- 1. Clean your system before you install your rack and pinion and your pump, reservoir and hoses.

 Contamination will kill your steering and cost you \$\$\$.
- 2. After installation, do not start or crank your engine until you fill the system with high grade power steering fluid (do not use transmission fluid). We recommend KRC power steering fluid.
 - 3. Follow instructions to bleed your system to remove all of the air.



Flaming River now manufactures Braided Stainless Hose Kits for our Power Steering Systems.

- All pressure ends are crimped fittings—eliminates banjo fittings
- Can be mounted straight off AN fitting or at 90° angle
- Hose angles can be rotated to almost any position
- Custom hose lengths available

| Part No. | Description |
|----------|--|
| FR1610 | FR Power Rack & Pinion - 30" Pressure & Return Line |
| FR1625 | GM Power Rack - 24" Pressure and Return Line |
| FR1623 | GM Power Box or Rack going to Integral Reservoir Pump |

Power steering pumps require a hose with a vacuum rating of 28 INCHES/HG on the inlet side, and a minimum $\frac{1}{2}$ "inside diameter. This is required to keep the hose from collapsing at higher RPMs. As seen in Photo 1 to the left, common hydraulic hose may have a -10 fitting on them, but the inside diameter is smaller than -6 (.265"). This will damage the pump because there is no way for the pump to intake enough fluid to meet its requirement through such a small hole.

Push-lock hose may be the proper inside diameter, but the vacuum rating is only 18 INCHES/MG. As the fluid warms up, this rating actually goes down. Push-lock hose will suck shut anywhere there is a bend in it, starving the pump of fluid and can cause severe damage to the internals of the pump. See Photo 2. The -6 pressure hose, leaving the pump, must have an operating pressure of 2,250 psi. and an inside diameter of .31". Common hydraulic hose may have the proper operating range, but their inside diameter is slightly smaller.

See Photo 3. The smaller diameter can restrict the flow to the steering gear. This can cause problems in your steering, such as tight spots in the turns and increased driver effort.

Also make sure the -10 feed line from the reservoir tank, remote tanks only, has a $\frac{1}{2}$ " inside diameter. Some companies have been importing tanks to the U.S. that have a $\frac{3}{8}$ " inside diameter. This will restrict flow to the pump and will damage the pump within a few races.







Power Steering Pumps & Accessories

Power Steering Made Easy

In most instances, the pumps provided with the rack and pinion are well matched and provide normal assist and driving stability. The Flaming River pump, which is 9.6 cc, will provide about 2.0 gpm at 1,500 rpm. The max. efficiency is reached at or about 1,350 rpm with an operating temp of 180°.

Street-driven cars have to consider ease of parking and highway stability. Pump speed at lower rpm should also be considered. Pulley size is normally 1:1 based on crankshaft pulley diameter. Generally, a heavy car with wider tires will require more assist, and lighter cars with narrower tires will require better road stability. The Flaming River pump provides a factory valve which will deliver approx. 2.0 gpm at approx. 1,500 rpm/pressure 145 psi.

For customers who want to tune or adjust the power steering system to maximize assist and road or track handling, we suggest our New High Rev Pump from KRC. This pump offers 9 different flow control valves. The valves are similar to jets in a carburetor. The I.D. B-E will improve assist, while the I.D. 4-7 will improve road handling. The lower the number, the greater the feel, but less assist. The higher the letter, the more assist, but less feel.

Keep in mind that adjusting your steering assist or stability is about finding the correct balance for your driving comfort.

KRC Pump



| Part No. | Description |
|----------|--|
| FR1574 | 6" Pulley V-Belt w/Rotary for GM/KRC Pumps - 5/8" Shaft |
| FR1578 | 6" Pulley V-Belt w/Holes for GM/KRC Pumps - 5/8" Shaft |

Flaming River now introduces a direct, bolt in replacement power steering pump for an alternative to all vehicles using GM II power steering systems. Engineered and assembled by KRC Power Steering, this item was designed with the same standards as KRC's racing pumps. The Flaming River High Rev pump allows for adjustable flow control fitting technology.

- Nine Changeable Flow Control Fittings To Aid In Driver Feel (Sold Separately)
- 2.22 Gpm Is The Standard Fluid Flow Rate; 1.05 Gpm To 3.17 Gpm Are Optional with Flow Control Fittings (Sold Separately)
- 1600 Psi Pressure Relief Valve
- Press On Pulley (5/8" Shaft)
- Hard Coated Rear Cover For Pump Longevity
- Less Cavitation And More Durable Than GM Type II Pumps
- Fully Manufactured In The United States
- Packaged With Warranty Card, Registration Card, And Full Installation Instructions

Hi-Rev Pump FR1590 Satin Finish FR1590PL Polished Finish

FR1590

5/8" Shaft

FR1639 90° Fitting Only

Flow Control Fittings

Available in Standard and High Performance Flow Rates

| Part No. | Description |
|----------|----------------------|
| FR1637KT | More Assist: B-C-D-E |
| FR1638KT | Less Assist: 4-5-6-7 |



Flaming River Pumps



Variable Pressure

Low-Flow Pump (3/4" Shaft Size)

FR1570 (w/o Pulley)
FRPMPSB-V (w/ V-Belt Pulley)

pre-assembled for easy installation)

FRPMPSB-S (w/ 7 groove S-Belt Pulley

pre-assembled for easy installation)

The intelligent design of this pump allows for pressure reduction at higher RPMs for maximum control during highway driving and easy steering in parking situations. Remote reservoir FR1614 required.



Flaming River Pump Shown with 4" Pulley.
4" Pulley is included with FR Pump.
6" Pulleys are Optional

4"/5" Pulleys



| Part No. | Description | |
|----------|---------------------------------------|--|
| FR1573 | 5" Pulley - GM P/S Pump - 5/8" Shaft | |
| A01G5001 | 4" Pulley V-Belt FR Pump - 3/4" Shaft | |
| 100385 | 4" Pulley V-Belt GM Pump - 5/8" Shaft | |

Precision Steel Power Steering Pump Bracket

This power steering pump bracket is for Stage II style pumps and features a revolutionary new design—made of black oxide steel and available for Small Block and Big Block vehicle applications. Features an adjustable design that allows for use with short neck and long neck water pumps. Includes a billet aluminum tension adjuster and mounting hardware. Manufactured using precision laser machinery.

| Part No. | Description | |
|----------|--------------------------------------|--|
| FR1612 | Small Block Chevy Flaming River Pump | |
| FR1613 | Big Block Chevy Flaming River Pump | |
| FR1591 | KRC Pump SB Bracket | |





Corvette-Style "Transverse Compact" Low-Flow Pump (5/8" Shaft Size FR1571

This Transverse Compact Pump is ideal for street rods and features a bearing design and a flow of 2.4 to 2.8 gallons per minute. Polished version also available. Remote Reservoir (FR1614) required.

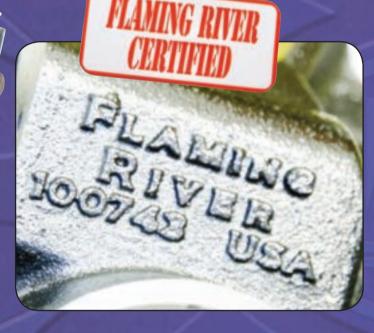
Steering Box Manufacturing

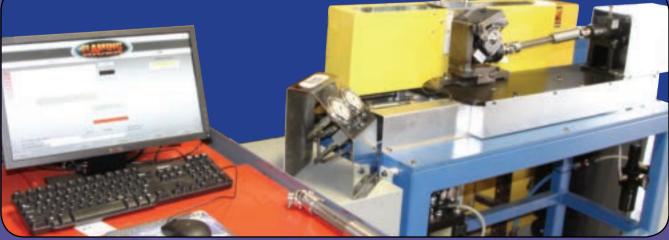
Each steering box begins with a U.S.A. made casting which we precisely machine and assemble with new components and then cycle test for quality assurance.

Each
Steering Box
Is Made with All
New Internals!









Each Flaming River manual steering box is tested for proper steering torque and bearing adjustment... Flaming River Certified!

Street Rod - Vega Boxes

Performance Vega Steering Boxes

The Flaming River Performance Vega style steering box is an all-new unit designed specifically for street rods. This box is 30% stronger than the OEM box and utilizes the latest technology with a smooth needle bearing design. This new design far outlasts the original bushing design of the 70's. The Vega-style box is preferred by most builders due to the steering geometry of straight-axle equipped cars. We have dramatically improved the Flaming River Vega-style box. There is no "VEGA" in the Flaming River Vega-style box!

Smooth Precise Steering:

- Direct bolt-in replacement
- New smooth needle bearing design for longer life
- Heavy-duty worm gear and roller bearing design is 30% larger than original for smoother, more comfortable steering end to end
- Crowned Sector Higher torque at center position reduces vibration and provides for more natural return of steering wheel.
- Stronger Casting & Internals
- New double cupped seal
- NEW high tech chromed cap included.
- Factory marked center position.
- One-Year Warranty

Note: Not recommended for vehicles that exceed 3,000 lbs. Not intended for circle track racing. Use in Motorsports activities voids all warranties.

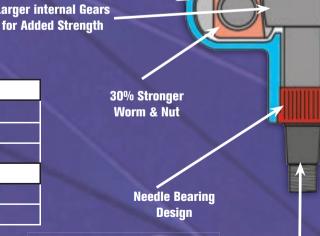
Engineered and Assembled in the USA

Larger internal Gears

| Part No. | Description | |
|-------------|---------------------------------|--|
| FR1500 | 20:1 Ratio - Black Finish | |
| FR1500Q | 16:1 Ratio - Black Finish | |
| FR1500C | 20:1 Ratio - Chrome Finish | |
| Pitman Arms | | |
| FR1493 | 6" Vega Style Steel Pitman Arm | |
| FR1493PL | 6" Vega Style Chrome Pitman Arm | |

Vega Mounting Bracket FR1500MP

This bracket allows for mounting of the Vega Box and comes complete with mounting plate and gusset. Note: Must be welded in place.





Stronger Pressure Casting

(Not Sand Casting)

30% Stronger Sector Shaft Vega Boxes

High-Performance Manual Steering Box Kits

These manual steering box kits are a direct replacement for power and larger manual boxes for most GM applications. The compact steering box weighs only 12 lbs. Can reduce front end weight by up to 30 lbs. **Kit Includes: Performance Steer**ing Box, Pitman Arm, Needle Bearing U-Joint, Shaft Adapter **Increase Horsepower, Reduce**

All new manual steering box designed specifically

- for racing and street use (weighs only 12 lbs.)
- Direct bolt-in replacement for most popular applica-
- Installs easily in under one
- Streamlines engine compartment
- Gain header clearance Note: Not recommended for vehicles that exceed 3,000 lbs. Not intended for circle track racing. Use in Motorsports activities voids all warranties.

| Part No. | Description |
|----------|--|
| FR1494 | 1973-77 Chevelle |
| FR1496 | 1975-79 Skylark - 1970-81 Camaro - 1975-79 Nova |
| FR1500BS | Vega-Style Ball Socket Manual Steering Box Kit - 1967-69 Camaro - 1967-68 Firebird |



NOTE: Adapter is recommended for installation FR1798-100,

(sold separately) Fits the following applications: 1967-69 Camaro 1968-74 Nova

1967-68 Firebird, **GMC Cyclone/Typhoon**

Note: Not Recommended for Vehicles over 3,000 lbs. Not intended for circle track racing or for use in vehicles that are subject to wheel stands. Use in Motorsports activities voids all warranties.

> Vega Steering Box installed in a 1976 Nova





| Part No. | Description | |
|-----------------------|---|--|
| T-Bucket Steering Box | | |
| FR1541 | T-Bucket Steering Box | |
| FR1541C | Chrome - T-Bucket Steering Box | |
| FR1541TEC | "Tech T"Chrome - T-Bucket Steering Box | |

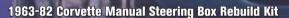
Lifetime Serviceability

Corvette Steering Boxes

All-New-Manual Steering Boxes for the 1963-82 Corvette

These manual steering boxes are manufactured from high-quality materials and contain all new components—including the sector, recirculating ball worm and nut, bushing, roller bearings, casting, and cap. This unit is dimensionally interchangeable with the original box, but all new parts improve the performance, steering, and handling of your vehicle. Available with quick 16:1 ratio preferred by enthusiasts.

| Year | Part No. | Pinion Shaft Size |
|---------|-----------|-------------------|
| 1963-68 | FR1513-36 | 3/4"-36 |
| 1969-82 | FR1513-30 | 3/4"-30 |



Flaming River offers a parts kit to rebuild your own box. Most rebuilt boxes on the market only have new bearings, races and seals installed. The worn nut and sector, which are the critical parts that are needed for

that new steering response, are not available new so the old parts are recycled into rebuilt boxes. We new offer all new internals so you can rebuild your box and get back on the road safely!

Note: Re-manufacturing your own steering box requires technical expertise and some machining may be necessary (i.e. bushings.)

| Year | Part No. | Pinion Shaft Size |
|---------|-----------|-------------------|
| 1963-68 | FR1514-36 | 3/4"-36 |
| 1969-82 | FR1514-30 | 3/4"-30 |



525 Style Manual Steering Box

This heavy-duty manual steering box is designed for heavier applications. It features a 3 bolt pattern and uses the stock manual pitman arm. Spline size is 3/4"-30 with a 20:1 ratio. Made with all-new parts—not rebuilt!

FR1543 20:1 Ratio





This adapter is ideal for increasing header clearance by eliminating the old rag joint from your stock power box. This box is resistant to corrosion with electroless nickel plating. With an overall length of 4-1/2", it can't be used for power to manual conversion, but is the best option for adding clearance to your existing setup.

Mopar Steering Wheel Adapters These Wheel Adapters allow for use of our WaterFall Wheel or a standard 5/6 bolt aftermarket wheel with the original 1970-74 Mopar "E" Body Steering Columns.

FR20119DO - 5/6 Bolt Patterns FR20119DO2 - WaterFall Wheel



Mopar Coupler Shaft Kit – Power to Manual Conversion - FR1505M

This kit simplifies installation by eliminating the factory coupler and is a must-have when converting from Power to Manual steering. Kit includes a coupler to fit the manual steering box, a connecting shaft, and a universal joint for the steering column.

| Part No. | Description |
|-------------|-------------------------------------|
| FR20150HGAD | FR Tilt Column |
| FR201500E | GM Column |
| FR20150M69 | Dodge 1966-69 |
| FR20150M70 | Dodge 1970-75 |
| FR20161AD | Flaming River Tuff Wheel Adapter |
| FR20180 | 5/6 Bolt 1966-69 |
| FR20181 | 5/6 Bolt 1970-75 |

1965-70 Classic Mustang Steering

Classic Mustang Manual Steering Boxes
The Popular Manual Steering Boxes for the 1965-70 Mustang are now made right here in the USA. Our Mustang Boxes are made from all-new component

right here, in the USA. Our Mustang Boxes are made from all-new components including a new casting, sector gear shaft, and internals—no

rebuilt parts in this box! Replace that worn steering

box with an all-new needle bearing steering

box and experience the difference in

steering, handling, and

performance!





1965-66 Mustang Manual Steering Box FR14970

This Manual Steering Box comes with a 1" sector shaft and 45" long steering shaft. Made with all-new components, it installs easily into the classic 1965-66 Mustangs. 16:1 ratio, but 19:1 ratio available upon request. Made in the USA.

1967-70 Mustang Manual Steering Box

FR1498

FR1498-6 67 (Mustang Only -Short Shaft 1" Sector)

This Manual Steering Box comes with a 1-1/8" sector shaft and short steering shaft. Made with all-new components and comes with 16:1 ratio.

Made in the USA.

1965-70 Mustang Power Steering Replacement These Power Steering Valves and Cylinders are all new pieces–not rebuilt. Minimum pump pressure at 465 RPM is 665 psi and .88 GPM. This system will not operate correctly without correct pump performance.

Note: 90 Day Warranty. Hoses/Pump not included.

| Part No. | Description |
|------------|--------------------------------|
| FR1497VLV | 1965-66 P/S Valve |
| FR1498VLV | 1967-70 P/S Valve |
| FR1498PWR | Power Steering Cylinder |
| FR1498VLKT | 1967-70 Valve and Cylinder Kit |



FR1497Q

FR1498PWR

FR1497VLV

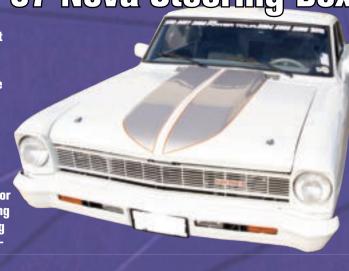
1962-67 Nova Steering Box

1962-67 Nova Manual Quick Ratio Steering Box Kit FR302KT

Flaming River makes a new direct bolt-in steering system for your early Nova. This kit eliminates the long shaft steering column and sloppy, worn-out steering box. This new box design mounts with a convenient chassis bracket and features a quick steering ratio with only 3-1/2 turns

lock-to-lock for an improved steering response. Because the Nova used a Slave Cylinder,

this Manual Box can be used with either a power or manual system. We've included virtually everything you need for a clean, simple installation—including the Mounting Bracket, Universal Joints, and an allnew Tilt Steering Column.





Alternators, Battery Disconnect Switches, Electrical Accessories

| Billet HD Amp - Alternators | 178-182 |
|---|---------|
| Battery Relocation Kit | 183 |
| Big Switch 500 | 184-185 |
| 250 Amp XL Big Switch | 186-187 |
| Big Switch, Big Switch with Removable Key & | 188 |
| Battery/Magneto Switch | |
| Big Switch w/Extension, Lever Kit 350 Amp | 189 |
| Switch & Jumper Cables | |
| Watch Dog . | 190-191 |
| Electro Wizard®/LV Switches | 192 |
| Battery/Alternator Switch | 193 |
| Little Świtch, Dual Battery Switch | 194 |
| Littelfuse® Products | 195-197 |
| Push-button Options | 197 |
| Apparel | 198 |
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Flaming River Performance Alternators

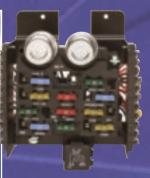


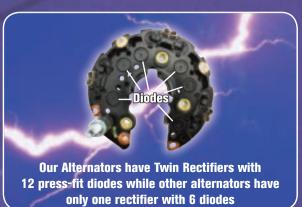
- Black, Natural, Polished and Chrome finishes available
- "Hairpin" stator design allows for more winding density and much higher output at engine idle RPM
- Much better high RPM stability solves high RPM charging problems that are common with OEM alternators
- Diodes 12 press fit diodes (instead of the standard 6 found in most aftermarket alternators)
- Double stacked heat sinks for more surface area and greatly improved cooling

6-Phase Technology

It's common to underestimate the power you really use. The Flaming River High Output alternators are available in 170 amp and 350 amp to give you the POWER YOU NEED!

| A/C | 20 AMPS |
|------------------|-----------------|
| FANS | 30 AMPS |
| AUDIO/AMP | 30 AMPS |
| EFI & PUMP | 15 AMPS |
| LIGHTS | 10 AMPS |
| AIR RIDE | 40 AMPS |
| POWER ACC | 15 AMPS |
| ELEC. WATER PUMP | <u>15 AMPS</u> |
| f | 175 AMPS |







installation easy.

This attractive design is sleek and smooth with your choice of finish. This technologically advanced design is perfect for early GM fitments. It features internal components similar to the 2017 Corvette alternator for true performance.

This 170 amp racing alternator with popular GM fitment drops into place easily but provides much more output at idle than traditional alternators. Simple Single Wire hook up makes

It is available in your choice of chrome, polished, satin black or natural finish. Style and performance in your choice of finish – it doesn't get better than that!



FR1108C





ONE-WIRE LS ENGINE SWAP ALTERNATORS 240 AMP SINGLE WIRE SINGLE WIRE DESIGN

This 240 Amp racing alternator features a simple one-wire hookup and side exit battery cable connection stud for increased clearance behind the alternator. This unit also features a seamless aluminum rear cover for a clean, smooth look. With over 120 amps at standard engine idle rpm and a smaller housing than a large case truck alternator. This alternator is an easy to install upgrade for any LS engine swap application using a GM truck or 98-02 F body bolt pattern adapter.

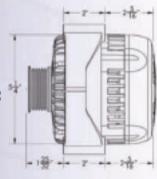


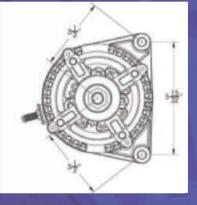
FR1194C Chrome Finish

FR1194P Polished Finish

FR1194B Satin Black Finish

FR1194N Natural Finish







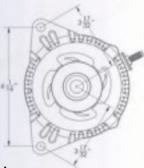
05-13 CORVETTE - Except ZR1 ALTERNATOR - SINGLE WIRE DESIGN

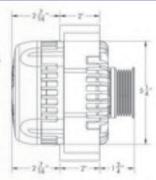


FR1152 170 Amp Natural Finish FR1153 170 Amp Polished Finish

FR1153C 170 Amp Chrome Finish

FR1154 170 Amp Satin Black Finish





PERFORMANCE ALTERNATORS

| Part No. | Amps | Finish | |
|--|-----------------|---------------|--|
| 63-85 GM Die Cast Housing, One-Wire | | | |
| FR1108C | 170 | Chrome | |
| FR1108B | 170 | Satin Black | |
| FR1108P | 170 | Polished | |
| FR1108N | 170 | Natural | |
| 88-95 C/K Truck Or Side Output Stud | ne-Wire | | |
| FR1116 | 240 | Natural | |
| FR1116C | 240 | Chrome | |
| FR1117 | 240 | Polished | |
| FR1118 | 240 | Satin Black | |
| 92-96 Corvette All - Turbo Charged Buic Direct Fit | • | t Fit/ | |
| FR1143 | 250 | Natural | |
| FR1144 | 250 | Polished | |
| FR1145 | 250 | Satin Black | |
| 05-13 Corvette - E | cept ZR1 Direct | Fit, One-Wire | |
| FR1152 | 170 | Natural | |
| FR1153 | 170 | Polished | |
| FR1153C | 170 | Chrome | |
| FR1154 | 170 | Satin Black | |
| 65-85 Ford V8, 85-95 Ford Mustang 6 & 12 O'Clock Bolt Pattern | | | |
| FR1167 | 170 | Natural | |
| FR1167C | 170 | Chrome | |
| FR1168 | 170 | Polished | |
| FR1169 | 170 | Satin Black | |
| FR1 170 | 240 | Natural | |
| FR1170C | 240 | Chrome | |
| FR1171 | 240 | Polished | |
| FR1172 | 240 | Satin Black | |
| | | | |

| Amps | Finish | |
|---------------------------------|--|--|
| | | |
| Single V Pulley | | |
| 150 | Natural | |
| Double V Pulley | 1 | |
| 150 | Natural | |
| 240 | Natural | |
| rate Motor, One-V | Vire | |
| 240 | Natural | |
| cket, racket, One-Wire | | |
| 240 | Chrome | |
| 240 | Polished | |
| 240 | Satin Black | |
| 240 | Natural | |
| 250 | Natural | |
| 250 | Satin Black | |
| 350 | Satin Black | |
| ar Output Stud | | |
| 350 | Satin Black | |
| 350 | Natural | |
| 250 | Satin Black | |
| 250 | Natural | |
| 05-13 GM Truck Rear Output Stud | | |
| 350 | Satin Black | |
| 250 | Satin Black | |
| 14-17 GM Truck Side Output Stud | | |
| 350 | Satin Black | |
| | Single V Pulley 150 Double V Pulley 150 240 Tate Motor, One-Ware 240 240 240 240 240 250 250 350 The Courage of State of | |



To determine your vehicle's pulley ratio, divide the diameter of your crankshaft pulley by the diameter of your alternator pulley



Ultra High Output Alternators for GM Truck and SUV 180+ amps at idle

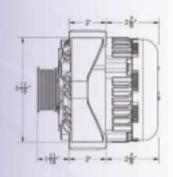


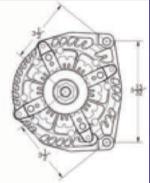
1996-2004 GM V8 TRUCKS



Uses 4-pin GM Plug

FR1197N350 350 Amp Natural FR1198N 250 Amp Natural





The Big Block of Alternators provides massive low RPM output. This high performance alternator features large case, rectifier and 12 press fit diodes for long service life under the most intense conditions.

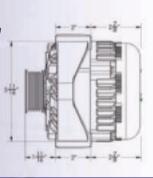
This alternator is ideal for high RPM racing applications running multiple fuel pumps and cooling fans and, of course, Full Size GM trucks requiring a lot of power.

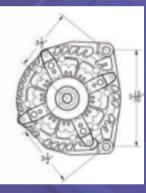
Available in 240 amp or 350 amp for the most intense applications. The 350 amp alternator is perfect for commercial and car audio applications that draw a lot of power.



2005-13 GM TRUCK AND SUV

FR119B350 350 Amp Satin Black FR1199 250 Amp Satin Black





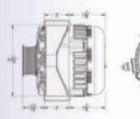


05-17 Alternators
Use 2-pin GM Plug

2014-17 GM TRUCK AND SUV

With side output stud to clear LT series engine

FR1200B350 350 Amp Satin Black





63-85 MOPAR

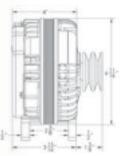


150 Amp Single Groove Pulley FR1174

150 Amp Double Groove Pulley

240 Amp Double Groove Pulley





- 100-120 amps at idle with a stock Mopar crankshaft pulley
- Single Rectifier Plate with eight diodes
- 3 times the output at idle Longer-lasting and more durable than OEM alternators 3 Year / 36,000 Mile Warranty Self-exciting or "one-wire" hookup Fits 1963-85 Mopar applications with "square back" or "round back" alternator design Built in the USA

Battery Relocation

FR1063 Battery Relocation Kit

Flaming River has introduced a new battery relocation kit. The 20 foot 2 gauge positive cable and 8 foot 2 gauge ground cable are flexible, soft and easy to work with. The cables are rated for 250 amps and have ultra-fine 100% copper conductor strands for low resistance and flexibility. Special braiding and a soft jacket make this kit extra flexible and easy to use. Heavy Duty copper ends simplify the installation process and all hardware is included for an easy install.

IMPROVED FLEXIBILITY EASIER TO WORK WITH

- WEIGHT SAVINGS 2 gauge cable in this kit is 50% lighter than standard 2 gauge cable
- IMPROVED FLEXIBILITY "Ultra-flexible" each cable is flexible, soft, and easy to work with.
- Cables are rated for 250 amps and have 4700 ultra-fine strands for low resistance and flexibility.
- All hardware is included for installation



FR1063 Kit Includes:

- 20 feet of red 2 gauge ultra-flexible positive cable
- 8 feet of black 2 gauge ultra-flexible ground cable
- (12) cable clamps and (12) self-tapping hex drive to the vehicle
- (12) plastic cable ties to secure the installation
- (6) heavy duty copper cable ends
- (1) negative battery clamp terminal
- (1) positive battery clamp terminal
- (6) waterproof heat shrink sleeves to seal the cable ends



FR1060 Battery Relocation Kit

Flaming River also offers the battery relocation kit with 1/0 gauge positive and ground cables. This kit includes (6) No Crimp Battery Cable Ends.









Set of (2) Heavy Duty Copper Cable Ends FR1061CL

Alternator Cable Install Kit



IR1061 Alternator Cable
Installation Kit with 250 Amp Fuse
IR106218 250 Amp Fuse
for 0 to 4 gauge cable
Kits Includes:

- 250 Amp fuse and fuse holder
- zero gauge positive and ground cables
- no crimp cable ends





500 Amp Battery Disconnect Switch



250 Amp Battery Disconnect Safety Switches

FR1044 New XL Terminal Big Switch **Battery Disconnect Switch**



- 250 Amps continuous service
- 2500 Amps for 5 second intervals (12V/24V)
- silver-plated copper electrical contacts
- · nickel-plated brass hardware
- · completely sealed, waterproof design
- three (3) year warranty

Complies with OSHA lock-out/tag-out regulation 1910.147



Longer Stud Length for Easier Cable Installation

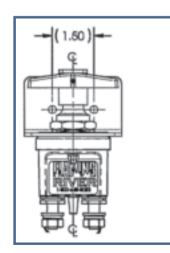
| Morrowhy | 2 Veere |
|---------------------------------|-----------------------------------|
| Warranty | 3 Years |
| Voltage | 12V/24V |
| Max Continuous Current | 250 Amps |
| Max Surge Current | 2500 Amps |
| Environmental Protection Rating | IP65 |
| Waterproof | Yes |
| Operating Temperature | -40°F to + 176°F (-40°C to +80°C) |
| Contact Terminals | Silver-Plated Copper |
| Contact Hardware | Nickel-Plated Brass |
| Stud Diameter | M10 |
| Available Stud Length | .95 in (approx. 61/64 in) |
| Max Tightening Torque | 11-13 ft·lbs |

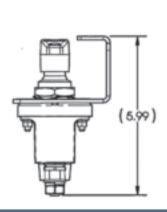


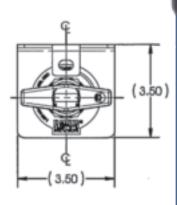
Lock Not Included

FR1014TM Terminal Covers for Grooved Terminal Stud

Sold in sets of two. Can be used to cover cables on all Battery Disconnect Switches. Sold separately from switch.









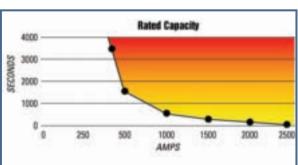
FR1044LED Big Switch Battery Disconnect with LED Indicator

The Big Switch is now available with an illuminated LED that provides a visual cue that easily identifies whether the switch and electrical system are ON or OFF for proper shut down procedure.

- LED Indicator Light Clear indicator that system is ON or OFF
- Rated Capacity 2500 Amps / 250 continuous
- · Stainless Steel Fasteners for corrosion resistance
- Waterproof
- · Silver-plated copper internal contact plates
- M10 studs
- Lock-out feature enables use of padlock for OSHA Lock-out/Tag-Out compliance regulation 1910.147

| Part No. | Description |
|-----------|---|
| FR1044LED | Big Switch Battery Disconnect with LED Indicator |
| FR1008LED | Lock-Out Bracket and LED Indicator only (for retrofit to existing "Big Switch") |





Note: Terminals on battery disconnect switches are live parts of the electrical system and should be treated just like battery terminals. Covers are recommended, but not included, for each kit. Contact your vehicle's manufacturer to determine proper placement and suitability.

FR1043 350 AMP Battery Disconnect Safety Switch

HD Amp Battery Disconnect Switch with Terminal Covers

This heavy-duty battery disconnect switch, with larger diameter terminal studs, is ideal for Class 8 Trucks, RVs, Chippers and other construction vehicles. Clip on terminal covers are designed to protect against arcing. Proprietary brass attaching nut allows 180 degree rotation. Higher Amp capacity – 2500 amps/350 continuous.

- Waterproof
- Silver plated copper internal contact plates
- Increased insulation to H Class rating
- Larger diameter studs .4725 inch (M12)
- Longer studs 1.25" to allow easier double cable connection
- Stainless Steel Fasteners for corrosion resistance
- LED option: Illuminated LED indicates whether system is on or off
- Lock-out option: Enables use of padlock for security



250 Amp Battery Disconnect Safety Switches

FR1003 The Big Switch Battery Disconnect Switch

Top racers realize that using a low amp switch creates resistance and actually reduces power. Flaming River's heavy duty battery disconnect switch is top of the line designed for complex electrical systems and 16 Volt batteries.

Rated at 250 amps continuous service (12/16/24V) and 2500 amps for 5 second surges.

Spring-loaded, vibration resistant, waterproof design.

Accepted by most sanctioning bodies including IHRA/NHRA.

Furnished with an easy-grip T-handle, anodized aluminum bracket and zinc plated mounting hardware.

FR1007 Mounting Bracket for The Big Switch

SW-HANDLE Replacement Handle for The Big Switch



FR1009 The Big Switch with Removable Key

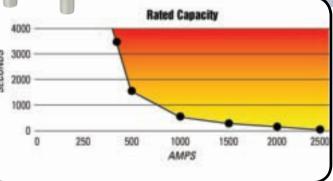
The Big Switch with removable laser cut, stainless steel key enhances the security and safety features available with the Big Switch. This unit is rated at 250 amps continuous service and 2500 amps for 5 second intervals (12V / 24V) It is a heavy duty, waterproof switch. The removable key feature is ideal for construction, farm equipment and passenger cars. An absolutely essential theft deterrent.

FR1009K Additional Laser Cut Key

FR1003TM Terminal Covers

Sold in sets of two, can be used to cover cables on all Battery Disconnect Switches.

Sold separately from switch.



Maximum Corrosion Protection

Steel pin functions as a dual tab to lock the spring-loaded stem in the open and closed position

The dual spring-loaded plunger prevents circuit interruption from shock and vibration

Silver plated copper is integral with the plunger for positive circuit completion

> Rubber O-Ring provides a waterproof seal



Gasket and O-Ring provide a waterproof seal to prevent contamination

Terminal Isolator between the terminals prevents accidental arcing

> Stainless Steel corrosion resistant fasteners



Dual circuit switch simultaneously shuts down both the battery and magneto. Waterproof spring-loaded design with silver plated brass contacts. Rated at 250 Amps continuous service, 2500 Amps for 5 second surges. Accepted for NHRA/IHRA competition use. Furnished with an easy grip T-Handle and anodized aluminum mounting bracket.





This industrial lever kit allows for remote mounting of the Big Switch. Kit includes a custom 15" aluminum rod, handle, and the switch.

- Rated at 250 amps continuous service (12/16/24V) and 2500 amps for 5 second surges.
- Spring-loaded, vibration resistant waterproof design.
- Accepted by most sanctioning bodies including IHRA/NHRA.
- Furnished with an easy-grip T-handle, anodized aluminum bracket and zinc plated mounting hardware.

Note: Terminals on battery disconnect switches are live parts of the electrical system and should be treated just like battery terminals. Covers are recommended, but not included, for each kit. Contact your vehicle's manufactured to determine proper placement and suitability.



FR1003-2 The Big Switch with Lever Kit
The lever kit allows for remote actuation
of the Big Switch. The kit includes
an 18" long, aluminum threaded rod,
T-handle, mounting bracket and necessary
hardware. A "push off" decal is included.
Accepted for NHRA/IHRA competition use.



FR1048 - 500 AMP Big Switch 500 - With Mounting Bracket

FR1048 Big Switch 500

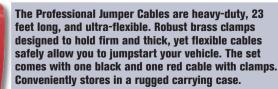
Flaming River now offer an alternative to the FR1003 switch for racing. Rated at 500 amps continuous service (12/16/24V) and 2500 amps for 5 second surges, this switch also has the added benefit of weight savings over the FR1003 switch: FR1003 22.4 oz. • FR1048 19.2 oz

Spring-loaded, vibration resistant, waterproof design.

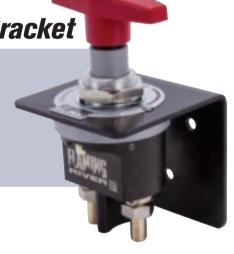
Accepted by most sanctioning bodies including IHRA/NHRA.

Furnished with an easy-grip T-handle, anodized aluminum bracket and zinc plated mounting hardware.

FR1070 BA Professional Jumper Cable



- Nominal Voltage 12V/24V
- Clamps Material: casting brass
- Cable Material: copper (cross section 50 mm2)
- Cable Insulation: highly flexible PVC
- Max Current Carrying Capacity: 1000 A for 30 s
- Short-term Current Capacity: 2000 A for 5 s



Automatic Battery Disconnect Safety Switch

FR1057 Watch Dog® - The Next Level Automatic Battery Disconnect Switch

The Watch Dog® is capable of handling 300 Amps of current continuously and designed with versatility in mind to function on both 12V and 24V systems. Utilizing bistable "magnetic latch" technology, the Watch Dog® secures its ON/OFF positions without current draw and requires over 80G of force to mechanically separate the contacts. The Watch Dog® has some of the highest International Protection ratings of IP76 and IP69K, ensuring that water and dust stay out. The Watch Dog® has built-in programmable time delay settings and a manual emergency toggle switch with a system status LED indicator.

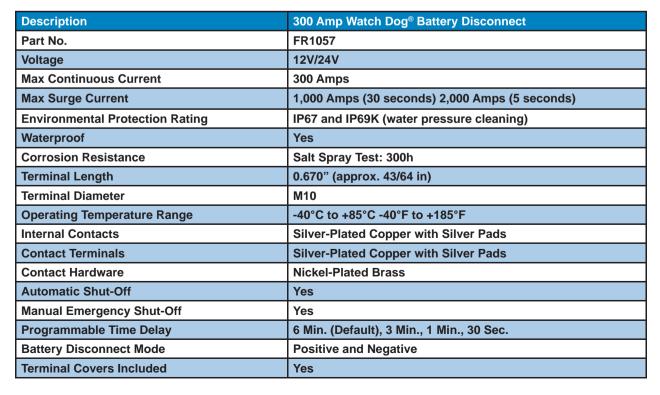


- Watch Dog[®] Main Battery Disconnect Switch
- Emergency Toggle Switch
- 4-way wire harness (8.33 feet)
- 7-way wire harness (13.25 feet)
- · Momentary Push Button

Top 5 Reasons to Use Watch Dog®:

- Simplify your shutdown routine with automatic battery disconnection and a programmable time delay (default 6 min).
- Bistable "Magnetic Latch" Technology. Main switch can maintain the ON and OFF positions without current consumption.
- Max continuous current load of 300 Amps. Supports 12V and 24V systems out of the box.
- Incredibly durable. Dust and water tight, even against high pressure water jets.
- Safety is a priority with the included Emergency Toggle Switch for manual Watch Dog® control.

NOTE: The Watch Dog® system is an electromechanical battery disconnect switch. The emergency external switch will only disconnect the battery from the electrical system. This product is NOT designed to deactivate the alternator or shut down the vehicle completely.

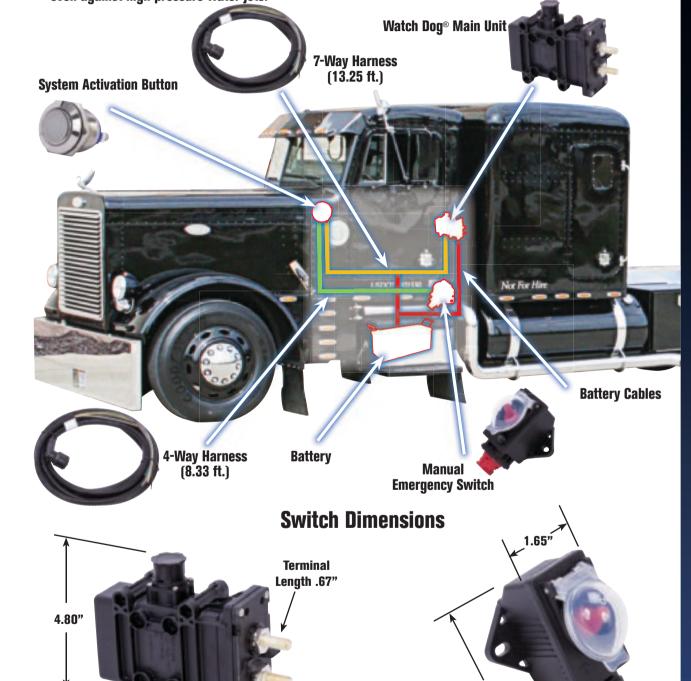




Bistable Magnetic Latch

- Bistable "Magnetic Latch" Technology. Main switch can maintain the ON and OFF positions without current consumption.
- Max continuous current load of 300 Amps. Supports 12V and 24V systems out of the box.
- Incredibly durable. Dust and water tight, even against high pressure water jets.





2.20"

4.00"

3.05"

Automatic Battery Disconnect Safety Switches



| Idea | | | |
|------|--|--|--|
| | | | |
| | | | |

- Construction & Farm Equipment / Mining & Off-Highway Vehicles
- Heavy-Duty Trucks
- Automotive / Racing
- Marine
- DEF System Compatible
- 12 Volt Electronic Battery Disconnect Switch. 24V system available upon request.
- Passive Magnetic Solenoid Operation –
 No mechanical switch to forget to operate
- Sealed Waterproof Design Can withstand severe operating condition

| Characteristics | Ratings |
|---------------------------------|-------------------------------------|
| Voltage | 12 Volts |
| Max Continuous Current | 250 Amps |
| Max Surge Current | 2500 Amps |
| Environmental Protection Rating | IP65 |
| Corrosion Resistance | Salt spray test: 300h |
| Operating Temperature | -40°F to +185°F |
| Terminal Specs | M10 (Diameter) 0.89 in. (Length) |
| Internal Contacts | Silver Plated Copper |
| Contact Terminals | Tin Plated Brass |

| Part No. | Description |
|----------|---|
| FR1051 | 12V Electro Wizard – Grounded Solenoid (Positive Disconnection ONLY) |
| FR1052 | 12V Electro Wizard – Insulated Solenoid (Positive AND Negative Disconnection Supported) |

| Part No. | Description |
|----------|---------------------------|
| FR1053 | 3 Minute Time Delay Relay |
| FR1055 | 6 Minute Time Delay Relay |

Electronic Components are Non-Returnable

Low-Voltage Battery Disconnect Safety Switch - FR1058

Stop battery drain with the Flaming River Low Voltage Disconnect!

- Automatic disconnection through battery voltage measurement. Disconnects auxiliary loads when battery has drained past a specified threshold. This is a safe battery level designed to allow the user to restart the vehicle.
- Battery charging will automatically reconnect the load
- Positive voltage from the ignition line will prevent load disconnection while the vehicle is operating
- Manual disconnection operated by dash mounted toggle ON/OFF switch
- System status can be monitored via LED indicator
- 1-3 mA current draw while monitoring battery voltage
- Thermal protection from overheating
- Environmentally sealed device for maximum life span (IP6K7/IPX9K ratings).
- Includes 4-way wire harness (13 feet long) with connections to Vehicle Ignition, Ground, Command Button, and Indicator Light



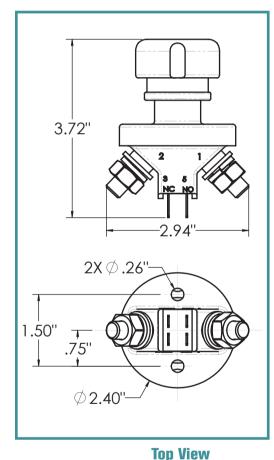
| Characteristics | Ratings |
|---|--|
| Operating Voltage (Fully Charged Battery) | 13.5V (12V System) 28V (24V System) |
| Preset Threshold Voltage | 12.1V |
| Max Continuous Current | 250 Amps |
| Max Surge Current | 800 Amps (30 seconds) 2000 Amps (5 seconds) |
| Environmental Protection Rating | IP6K7/IPX9K |
| Corrosion Resistance | Salt Spray Test: 300 hrs |
| Operational Temperature | -40°F to +185°F |
| Time Delay | 60 seconds |
| Contacts/Terminals | Silver Plated Copper |
| Terminal Dimensions | M10 (Diameter) 0.94 in. (Length) |

Battery and Alternator Disconnect Switch

FR1013 Combination Battery and Alternator Kill Switch

This combo kill switch designed to completely shut down the battery and charging system in an emergency situation. Ideal for racing, vehicle storage, marine and RV applications. Prevents battery drain, theft, and reduces the risk of electrical fire.

- Push Off for emergency shut-down and color-coded to indicate operating position - ON or OFF, with a durable spring-loaded design
- Meets IHRA, NHRA and SCCA sanctioning body requirements Rated Capacity:
- Battery 2000 Amp Surge
- 150 Amp Continuous
- Alternator 120 Amp



| Description Combination Battery and Alternator Kill Switch Part No. FR1013 Warranty 1 Year Voltage 12V/24V Max Continuous Current 150 Amps (battery) Max Surge Current 1,200 Amps (5 seconds) Max Current for Auxiliary Terminals 5 Amps Environmental Protection Rating IP65 Alternator 120 Amps Waterproof Yes Operating Temperature Range -30°C to +60°C -22°F to +140°F Contact Terminals Silver Plated Copper Contact Hardware Brass Stud Diameter M10 Available Stud Length 0.813" (approx. 13/16 in) Max Tightening Torque 11-13 ft-lbs LED ON/OFF Indicator No Lock-Out Capability No Mounting Bracket Included No Protective Cover Included No Extension Handle/Lever No Additional Notes Approved for IHRA, NHRA, and SCCA competition use | | |
|--|-------------------------------------|---|
| Warranty 1 Year Voltage 12V/24V Max Continuous Current 1,200 Amps (battery) Max Surge Current 1,200 Amps (5 seconds) Max Current for Auxiliary Terminals Environmental Protection Rating IP65 Alternator 120 Amps Waterproof Ves Operating Temperature Range -30°C to +60°C -22°F to +140°F Contact Terminals Silver Plated Copper Contact Hardware Brass Stud Diameter M10 Available Stud Length 0.813" (approx. 13/16 in) Max Tightening Torque 11-13 ft-lbs LED ON/OFF Indicator No Lock-Out Capability No Mounting Bracket Included No Protective Cover Included No Extension Handle/Lever No | Description | Combination Battery and Alternator Kill Switch |
| Voltage 12V/24V Max Continuous Current 150 Amps (battery) Max Surge Current 1,200 Amps (5 seconds) Max Current for Auxiliary Terminals 5 Amps Environmental Protection Rating IP65 Alternator 120 Amps Waterproof Yes Operating Temperature Range -30°C to +60°C -22°F to +140°F Contact Terminals Silver Plated Copper Contact Hardware Brass Stud Diameter M10 Available Stud Length 0.813" (approx. 13/16 in) Max Tightening Torque 11-13 ft-lbs LED ON/OFF Indicator No Lock-Out Capability No Mounting Bracket Included No Protective Cover Included No Extension Handle/Lever No | Part No. | FR1013 |
| Max Continuous Current Max Surge Current 1,200 Amps (5 seconds) Max Current for Auxiliary Terminals Environmental Protection Rating IP65 Alternator 120 Amps Waterproof Ves Operating Temperature Range -30°C to +60°C -22°F to +140°F Contact Terminals Silver Plated Copper Contact Hardware Brass Stud Diameter M10 Available Stud Length 0.813" (approx. 13/16 in) Max Tightening Torque 11-13 ft-lbs LED ON/OFF Indicator Lock-Out Capability No Mounting Bracket Included No Protective Cover Included No Extension Handle/Lever No | Warranty | 1 Year |
| Max Surge Current 1,200 Amps (5 seconds) Max Current for Auxiliary Terminals Environmental Protection Rating IP65 Alternator 120 Amps Waterproof Ves Operating Temperature Range -30°C to +60°C -22°F to +140°F Contact Terminals Silver Plated Copper Contact Hardware Brass Stud Diameter M10 Available Stud Length 0.813" (approx. 13/16 in) Max Tightening Torque 11-13 ft-lbs LED ON/OFF Indicator No Lock-Out Capability No Mounting Bracket Included No Protective Cover Included No Extension Handle/Lever No | Voltage | 12V/24V |
| Max Current for Auxiliary Terminals Environmental Protection Rating IP65 Alternator 120 Amps Waterproof Ves Operating Temperature Range -30°C to +60°C -22°F to +140°F Contact Terminals Silver Plated Copper Contact Hardware Brass Stud Diameter M10 Available Stud Length 0.813" (approx. 13/16 in) Max Tightening Torque 11-13 ft·lbs LED ON/OFF Indicator Lock-Out Capability No Mounting Bracket Included No Protective Cover Included No Extension Handle/Lever No | Max Continuous Current | 150 Amps (battery) |
| Environmental Protection Rating Alternator 120 Amps Waterproof Yes Operating Temperature Range -30°C to +60°C -22°F to +140°F Contact Terminals Silver Plated Copper Contact Hardware Brass Stud Diameter M10 Available Stud Length 0.813" (approx. 13/16 in) Max Tightening Torque 11-13 ft-lbs LED ON/OFF Indicator Lock-Out Capability No Mounting Bracket Included No Protective Cover Included No Extension Handle/Lever No | Max Surge Current | 1,200 Amps (5 seconds) |
| Alternator 120 Amps Waterproof Yes Operating Temperature Range -30°C to +60°C -22°F to +140°F Contact Terminals Silver Plated Copper Contact Hardware Brass Stud Diameter M10 Available Stud Length 0.813" (approx. 13/16 in) Max Tightening Torque 11-13 ft-lbs LED ON/OFF Indicator No Lock-Out Capability No Mounting Bracket Included No Protective Cover Included No Extension Handle/Lever No | Max Current for Auxiliary Terminals | 5 Amps |
| Waterproof Operating Temperature Range -30°C to +60°C -22°F to +140°F Contact Terminals Silver Plated Copper Contact Hardware Brass Stud Diameter M10 Available Stud Length O.813" (approx. 13/16 in) Max Tightening Torque 11-13 ft·lbs LED ON/OFF Indicator Lock-Out Capability No Mounting Bracket Included No Protective Cover Included No Extension Handle/Lever No | Environmental Protection Rating | IP65 |
| Operating Temperature Range -30°C to +60°C -22°F to +140°F Contact Terminals Silver Plated Copper Contact Hardware Brass Stud Diameter M10 Available Stud Length 0.813" (approx. 13/16 in) Max Tightening Torque 11-13 ft-lbs LED ON/OFF Indicator No Lock-Out Capability No Mounting Bracket Included No Protective Cover Included No Extension Handle/Lever No | Alternator | 120 Amps |
| Contact Terminals Contact Hardware Brass Stud Diameter M10 Available Stud Length Max Tightening Torque LED ON/OFF Indicator Lock-Out Capability Mounting Bracket Included Protective Cover Included Extension Handle/Lever Silver Plated Copper Brass M10 0.813" (approx. 13/16 in) 11-13 ft·lbs No No No No No Extension Handle/Lever No | Waterproof | Yes |
| Contact Hardware Brass Stud Diameter M10 Available Stud Length 0.813" (approx. 13/16 in) Max Tightening Torque 11-13 ft-lbs LED ON/OFF Indicator No Lock-Out Capability No Mounting Bracket Included No Protective Cover Included No Extension Handle/Lever No | Operating Temperature Range | -30°C to +60°C -22°F to +140°F |
| Stud Diameter M10 Available Stud Length 0.813" (approx. 13/16 in) Max Tightening Torque 11-13 ft-lbs LED ON/OFF Indicator No Lock-Out Capability No Mounting Bracket Included No Protective Cover Included No Extension Handle/Lever No | Contact Terminals | Silver Plated Copper |
| Available Stud Length Max Tightening Torque LED ON/OFF Indicator Lock-Out Capability Mounting Bracket Included Protective Cover Included Extension Handle/Lever No 0.813" (approx. 13/16 in) No 11-13 ft-lbs No No No No | Contact Hardware | Brass |
| Max Tightening Torque 11-13 ft-lbs LED ON/OFF Indicator No Lock-Out Capability No Mounting Bracket Included No Protective Cover Included No Extension Handle/Lever No | Stud Diameter | M10 |
| LED ON/OFF Indicator No Lock-Out Capability No Mounting Bracket Included No Protective Cover Included No Extension Handle/Lever No | Available Stud Length | 0.813" (approx. 13/16 in) |
| Lock-Out Capability No Mounting Bracket Included No Protective Cover Included No Extension Handle/Lever No | Max Tightening Torque | 11-13 ft·lbs |
| Mounting Bracket Included No Protective Cover Included No Extension Handle/Lever No | LED ON/OFF Indicator | No |
| Protective Cover Included No Extension Handle/Lever No | Lock-Out Capability | No |
| Extension Handle/Lever No | Mounting Bracket Included | No |
| | Protective Cover Included | No |
| Additional Notes Approved for IHRA, NHRA, and SCCA competition use | Extension Handle/Lever | No |
| | Additional Notes | Approved for IHRA, NHRA, and SCCA competition use |

Push O_f







Alternator/Ignition Terminals

Bottom View



Battery Terminals

Note: Terminals on battery disconnect switches are live parts of the electrical system and should be treated just like battery terminals. Covers are recommended, but not included, for each kit.

Contact your vehicle's manufactured to determine proper placement and suitability.

Little Switch

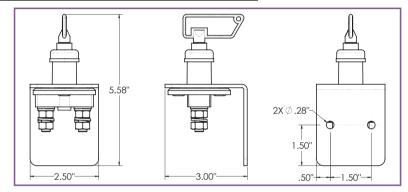
FR1002 The Little Switch FR1002-1 The Little Switch (No Mounting Bracket)

The Little Switch is rated at 100 amps continuous service and 500 amps for 10 second surges making it ideal for street rods, classics and passenger cars. In addition to preventing battery drain, this unique switch is also a cost effective anti-theft device. A rubber boot seals the neck from moisture and dirt.

- · Competition approved by IMSA, ARCA, and SCCA.
- Inexpensive Anti-theft Device Prevents Battery Drain
- Water Resistant
 Removable Key

| Part No. | FR1002 |
|--|---------------------------------|
| Warranty | 1 Year |
| Voltage | 6V/12V/24V |
| Max Continuous Current | 100 Amps |
| Max Surge Current | 500 Amps (10 seconds) |
| Environmental Protection Rating | IP4X |
| Operating Temperature Range | -40°C to +50°C, -40°F to +122°F |
| Contact Terminals | Copper |
| Contact Hardware | Zinc Plated Steel |
| Stud Diameter | M8 |
| Available Stud Length | 0.50" |
| Max Tightening Torque | 4.43 ft·lbs / 6 N·m |
| LED ON/OFF Indicator | No |
| Lock-Out Capability | Yes - Removable Key |
| Replacement Key Part No. | FR1002K |

| Mounting Bracket Included | Yes | |
|--|------------------------------|--|
| Mounting Bracket Part No. | FR1004 | |
| Protective Cover Included | Yes - Protective Rubber Boot | |
| Protective Cover Part No. FR1002BT | | |
| Approved for IMSA, ARCA and SCCA Competition Use | | |



FR1050 Dual Battery Disconnect Switch

The Dual Battery Disconnect Switch allows for two batteries to operate independent of one another, or for both to be in the ON or OFF position at the same time.

- Rated at 300 Amps continuous service, and 1000 Amps for 5 second surges.
- 12 or 24 Volts
- IP 54 Rating
- 300 Amps Continuous
- 1000 Amps Surge for 5 Seconds
- · Silver Plated Contacts



| Description | Dual Battery Disconnect Switch |
|---------------------------------|--|
| Part No. | FR1050 |
| Warranty | 1 Year |
| Voltage | 12V and 24V |
| Max Continuous Current | 300 Amps |
| Max Surge Current | 1,000 Amps (5 seconds) |
| Environmental Protection Rating | IP54 |
| Operating Temperature Range | -40°C to +50°C -40°F to +122°F |
| Internal Contacts: | Silver Plated Copper |
| Contact Terminals | Copper |
| Contact Hardware | Brass |
| Stud Diameter | M10 Available |
| Stud Length | 0.5" (1/2 in) |
| Tightening Torque | 11-13 ft·lbs |
| Switch Modes | 4 Modes: #1 On, #2 On, Both On, Both Off |





Flaming River is now an authorized distributor for Littelfuse products!

We now carry a variety of Littelfuse emergency fuse kits that cover OEMs such as Ford, GM, and Chrysler, as well as diagnostic kits that can be used to test and replace fuses on the go. Adding a fuse to a circuit? Grab an inline fuse holder for quick and convenient installation.

Perhaps you need a larger selection? Look for the Super Value Packs of fuses that include ATO, MINI, MAXI, JCASE, MICRO2, MICRO3, or MCASE fuses. Automatically identify faulty fuses with the Smart Glow options available in the ATO and MINI series. These packs include up to 60 fuses to keep you stocked and ready.

The Littelfuse Red Box modules offer bulk fuses in multiple types and configurations stored inside one compact, portable, and organized carrying case. Cover almost any of your circuit protection needs with the hundreds of fuses available with Red Box!

Specialty products such as 12V/40A plug-in relays and small, inexpensive anti-theft battery disconnect switches are ready to assist and protect your vehicle when you need them most.

Electronic Components are Non-Returnable

| - | decironic components are non netarnable | |
|---------|--|----------|
| FR80000 | ATO® Emergency Fuse Kit 1 each: ATO® fuses 5A, 10A, 15A, 20A, 25A, 30A 1, ATO® Fuse Puller | |
| FR80001 | ATO® Emergency Diagnostic Kit 1 each: ATO® fuses 5A, 10A, 15A, 20A, 25A, 30A 1, ATO® Fuse Tester/Puller | 24.50 |
| FR80002 | MINI® Emergency Fuse Kit 1 each: MINI® fuses 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A 1, MINI® Fuse Puller | |
| FR80003 | MINI® Emergency Diagnostic Kit 1 each: MINI® fuses 3A, 4A, 7.5A, 10A, 15A, 20A, 25A, 30A 1, ATO®/MINI® Fuse Tester/Puller | |
| FR80004 | ATO®/Mini Emergency Diagnostic Kit 1 each: ATO® fuses 5A, 10A, 15A, 20A, 25A, 30A 1 each: MINI® fuses 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A 1, Fuse Puller | |
| FR80005 | GM OEM Emergency Fuse Kit 1 each: MINI® fuses 7.5A, 25A, 30A 2 each: MINI® fuses 20A 3 each: MINI® fuses 10A, 15A 1 each: Low Profile MINI® fuses 10A, 40A, 50A 1 each: Low Profile JCASE® fuses 30A, 40A | T Marina |
| FR80006 | FORD OEM Emergency Fuse Kit 1 each: MINI® fuses 7.5A, 25A, 30A 2 each: MINI® fuses 20A 3 each: MINI® fuses 10A, 15A 1 each: Low Profile MINI® fuses 10A, 15A 1 each: JCASE® fuses 20A, 30A, 40A, 50A 1 each: Low Profile JCASE® fuses 30A, 40A | |
| FR80007 | Chrysler/Dodge/Jeep Emergency Fuse Kit 1 each: MINI® fuses 7.5A, 25A, 30A 2 each: MINI® fuses 20A 3 each: MINI® fuses 10A, 15A 1 each: JCASE® fuses 20A, 30A, 40A, 50A | - |
| FR80008 | ATO® Inline Fuse Holder, 16AWG Wire, 20A Max ATO® inline fuse holder, Includes 16AWG wire and supports a max amperage of 20A | |

| FR80009 | ATO® Inline Fuse Holder, 12AWG Wire, 30A Max ATO® inline fuse holder. Includes 12AWG wire, and supports a max amperage of 30A | |
|---------|--|--|
| FR80010 | ATO® Inline Fuse Holder, 12AWG Wire, with 30A Fuse ATO® inline fuse holder. Includes one 30A fuse, 12AWG wire, and supports a max am | operage of 30A |
| FR80011 | Sealed ATO® Inline Fuse Holder, 12AWG Wire, 30A Max ATO® inline fuse holder with a sealed cap that protects the fuse connection. Includes 12AWG wire and supports a max amperage of 30A | X |
| FR80012 | 12V/40A Plug-in Relay with Mounting Bracket 40A relay for use in 12V systems. Comes with snap-in mounting bracket. | T Limited |
| FR80013 | ATO®/MINI® Fuse Puller with Tester For ATO® and MINI® fuses with a 1.5V fuse tester | |
| FR80015 | MICRO2™, MICRO3™ Fuse Puller For MICRO2™ and MICRO3™ fuses | |
| FR80016 | MAXI Fuse Puller For MAXI blade fuses | |
| FR80017 | ATO®/MINI® Fuse Puller (White) For ATO® and MINI® fuses | |
| FR80018 | RedBox™ Low Profile Mini Fuses 5 each: Low Profile MINI® fuses 5A, 2OA, 25A 10 each: Low Profile MINI® fuses 7.5A, 1OA, 15A, 3OA 1, ATO®/MINI® Fuse Puller (White) | Ed Littelluse* |
| FR80019 | RedBox™ JCASE® Fuses 2 each: JCASE® 32V fuses 20A, 30A, 40A, 50A, 60A 1, JCASE® Fuse Puller | |
| FR80020 | RedBox™ MINI®/ATO®/MAXI Fuses 10 each: ATO® fuses 5A, 7.5A, 40A 25 each: ATO® fuses 10A, 15A, 20A, 25A, 30A 10 each: MINI® fuses 5A, 7.5A, 25A, 30A 20 each: MINI® fuses 10A, 15A, 20A | Er titules |
| FR80021 | RedBox [™] MICRO2 [™] , MICRO3 [™] , Low Profile JCASE®, M 10 each: MICRO2 [™] fuses 5A, 7.5A, 10A, 15A, 20A, 25A 10 each: MICRO3 [™] fuses 5A, 7.5A, 10A 10 each: MCASE® fuses 20A, 25A, 30A, 40A 10 each: Low Profile JCASE® 20A, 25A, 30A, 40A, 50A, 60A | Case® Fuses |
| FR80022 | Anti-theft Battery Master Switch, Detachable Detachable version features a special disconnect that allows the battery to be easily isolated. Perfect for seasonal vehicle storage and anti-theft protection. One of the lowest cost anti-theft devices on the market. Simple turn of the knob disconnects the battery. Fits all standard top mount post batteries. Works on 12V-24V systems up to 135A | The second secon |
| FR80023 | Anti-theft Battery Master Switch, Fused Fused version maintains current to all electrical circuits such as the alarm, on-board computer, central locking system, and radio memory presets. One of the lowest cost anti-theft devices on the market. Simple turn of the knob disconnects the battery. Fits all standard top mount post batteries Works on 12V-24V systems up to 135A | No states |
| FR80024 | ATO® Fuse Super Value Pack, 40 pcs 5 each: ATO® 32V fuses 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A 1, Fuse Tester/Puller | 10 W 11 |
| FR80025 | | S (1) |

| | FR80026 | MINI® Fuse Super Value Pack, 40pcs 5 each: MINI® 32V fuses 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A 1 Fuse Tester/Puller | |
|-------------|---------|---|---------|
| 70.6 | FR80027 | MINI® Smart Glow Fuse Super Value Pack, 36 pcs 6 each: MINI® Smart Glow 32V fuses 5A, 10A, 15A, 20A, 25A, 30A | 7 1 |
| | FR80028 | MINI®/ATO®/MAXI Fuse Super Value Pack, 21 pcs 1 each: ATO® fuses 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A 1 each: MINI® fuses 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A 1 each: MAXI fuses 20A, 30A, 40A, 50A, 60A | To come |
| To a second | FR80029 | MINI®/JCASE® Fuse Super Value Pack, 29 pcs 5 each: MINI® fuses 10A, 15A, 20A, 25A, 30A 1 each: JCASE® fuses 20A, 30A, 40A, 50A | |
| | FR80030 | MICRO2 [™] , MICRO3 [™] & MCASE® Fuse Super Value Pack, 60 pcs 5 each: MICRO2 [™] fuses 5A, 7.5A, 10A, 15A, 20A, 25A, 30A 5 each: MICRO3 [™] fuses 5A, 7.5A, 10A, 15A 1 each: MCASE® fuses 15A, 20A, 25A, 30A, 40A 1, MICRO2 [™] /MICRO3 [™] Fuse Puller 1, MCASE® Fuse Puller | |
| | Morr | v Duck-Dutton Ontions | |

New Push-Button Options

Illuminated Rocker Switches



Blue FR1304



| Characteristics | Specifications |
|-------------------|---------------------------------------|
| LED Color | Blue FR1304 • Red FR1303 |
| Max Voltage | 12VDC |
| Max Current | 20 Amps |
| Termination Style | 0.250 in. Blade |
| Mount Type | Snap-In, 0.5 in. x 1.00 in. Rectangle |
| Switch Type | Rocker (ON/OFF), SPST |

Illuminated Push-Button Switches



| Characteristics | Specifications |
|-------------------|---|
| LED Color | Green FR1305 |
| Max Voltage | 50VDC, 125VAC |
| Max Current | 125 milliamps |
| IP Rating | IP65 |
| Termination Style | Solder Lugs |
| Mount Type | Panel, 0.535 in. Dia w/ 0.508 in. to Flat |
| Switch Type | Momentary On, SPST |
| Contact Plating | Gold |

Stainless Steel Push-Button Switches











| | _ | | |
|-----|-------|------------|-----|
| | 000 | Flat FR130 | |
| mai | KIHII | | 1/4 |
| - | | 1100 11110 | |

| Characteristics | Specifications |
|-------------------|-----------------------------------|
| Button Styles | Dome FR1300 |
| | Flat FR1301 Raised Flat FR1302 |
| Max Voltage | 48VDC |
| Max Current | 2 Amps |
| IP Rating | IP65 |
| Termination Style | Screw Terminals |
| Mount Type | Panel, 19mm Diameter Cutout |
| Switch Type | Momentary On, SPST |
| Contact Plating | Silver |